7TA TIER

SOAP.

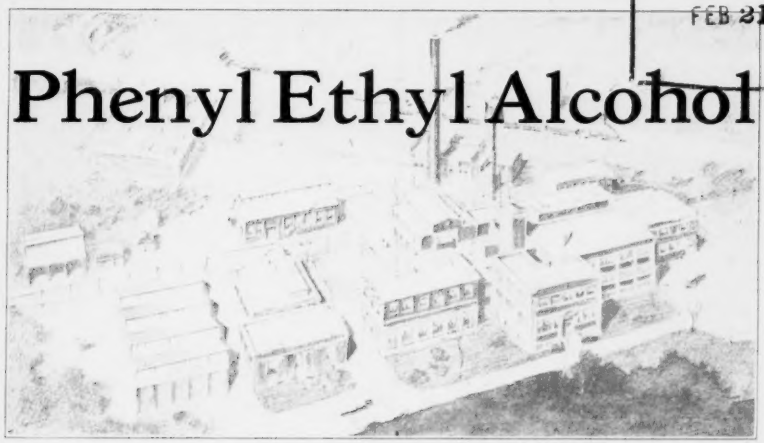
A MONTHLY MAGAZINE

for Manufacturers of Soaps of All Kinds, Disinfectants, Household Insecticides, Cleaning Preparations, Polishes and Allied Products

VOLUME TWO | FEBRUARY, 1927 | NUMBER SIX

RECEIVED
FEB 21 1927

Phenyl Ethyl Alcohol



The plant behind Givaudan-Delawanna Products

LARGE scale production tends to lower the manufacturing cost and also the selling price of an article. By supporting the American manufacturer now, the future will bring lower prices.

Assure yourself of standard and uniform products at minimum cost, by using "GIVAUDAN-DELAWANNA" PHENYL ETHYL ALCOHOL. It is unequaled.

Let us submit samples and quotations

TRADE GIVAUDAN SYNTHETICS DELAWANNA MARK

GIVAUDAN-DELAWANNA, INC.

101 FIFTH AVENUE, NEW YORK, N. Y.

Let Us Quote On Your 1927 Requirements of

SANTOCHLOR

REGISTERED U.S. PATENT OFFICE

Pure Paradichlorbenzene

Available in the following sizes:--

"C-8"

For Moth Prevention
(And Miscellaneous Uses)

"8-16"

For Shaker Top Cans

"16-24"

For Peach Tree Borer
(Insecticide and Miscellaneous Uses)

Pure, uniformly sized crystals—completely volatile

Prompt shipments in 100-lb. and 200-lb. barrels

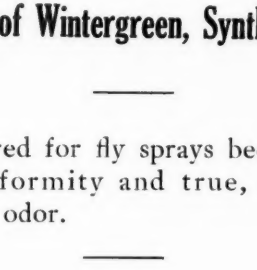
METHYL SALICYLATE

U. S. P.

Oil of Wintergreen, Synthetic

Preferred for fly sprays because of its uniformity and true, characteristic odor.

Available in handy 50-lb. tins as well as in 100-lb. and 500-lb. tin-lined drums.



Manufactured by

Monsanto Chemical Works

ST. LOUIS, U.S.A.

12 Platt St. NEW YORK
500 N. Dearborn St. CHICAGO, ILL.
149 California St. SAN FRANCISCO

MONSANTO

CHEMICALS = QUALITY
MONSANTO
ST. LOUIS, U.S.A.

February
1 9 2 7

SOAP

Volume Two
Number Five

The Editor's Page

On Rosin Marketing

ANYBODY who has bought rosin during the past two years, knows what has happened to the price. He also knows that a number of other things have happened which have caused a distinct feeling of animosity toward the rosin people. That there has been a steadily growing sentiment against the manner in which rosin prices have multiplied and against the attempts of the naval stores' interests to support their market through the aid of federal legislation, is quite apparent to anybody who has talked with rosin consumers.

Not only do rosin prices hold at the unprecedented levels established in 1925, but there is a belief current that the 1926 tabling of the Haugen-McNary Bill did not end the attempts to hitch the naval stores industry to the tail of the agricultural kite for centralized marketing and the permanent establishment of high prices by the practical elimination of competition through legislation. It is no secret that paper, varnish, and soap interests are watching Washington closely for fear that a naval stores rider may be tacked to any bill on its way through Congress.

Now comes the matter of rosin barrel tares. As the price went up, apparently tares also increased. Heavier and heavier barrels were used to ship the rosin. In some cases, staves and heads have become so heavy as to be actually ludicrous. On some 500 pound rosin barrels, tares over 100 pounds have become not uncommon. With rosin costing five or six cents per pound, and sold on a basis of gross for net, this makes the barrel a rather expensive proposition. It means the buyer is paying a fancy price for waste wood. He also pays fifteen or twenty per cent more for his rosin than the quoted price would indicate. This is the reason why consumers are beginning to demand an end to nonsensical tares, and are urging the marketing of rosin on a net price per pound basis. The tare abuse is also one of the reasons why a distinct sentiment of hostility toward the naval stores people is crystallizing among large consumers.

There is great need for reform in the whole rosin marketing situation. The sooner it is instituted, the sooner will the rosin people regain the confidence of consumers.

Know Thy Costs!

IF THE ten commandments were rewritten especially to apply to business organizations, "Know thy costs" should be number one on the list. Although most every manufacturer has some kind of a scheme whereby he believes that he is determining his cost of doing business, it is a safe bet that not half of industrial organizations have a means of securing accurate figures on their true costs. This condition may be alright in times of prosperity and good business, but when orders are scarce and profits are lean, it is a sure source of trouble.

The opinion has been expressed frequently that most price cutting is due to ignorance of true costs. There is no question but that a great deal of it can be traced directly to this cause. When competition is the spur, selling prices are liable to be the victims of an overkeen desire to get the business. The fact that the other fellow's price is almost as low, or equally as low, in reality has nothing whatsoever to do with it. Where one manufacturer has lower costs, naturally he can sell lower. To justify a low price in the face of unknown costs, it is foolhardy to point out that competitors are paying the same for labor, for fats and oils, for coal, for containers, and other raw materials. This is only a part of the story.

Profits in the soap industry have been cut to the bone by competition. This is the view of practically every soapmaker with whom the matter has been discussed. Competition has brought low prices and the closing of some plants. Were there a universal knowledge of true manufacturing costs, it is extremely doubtful if many of the extremely low figures ever would be quoted. Where a definite loss is obvious, there is greater hesitancy to take business at prices which make this possible. It is mostly where prices are quoted "in the dark" as far as costs are concerned, that a piece of

Insecticide and Disinfectant Section Begins on Page 49

business entails actual loss. This leads one to believe that comparatively few soap manufacturers know their costs.

Cost finding, that is truly accurate cost finding, has opened the eyes of many a manufacturer. A large number of soapmakers are apparently much in need of having their eyes opened if price-cutting in the business is really as bad as it seems.

The Automatic Machine Age

WE WONDER if those industries which have benefitted most by the development of automatic machinery of all kinds, have ever stopped to appreciate what their positions might be today if they had to depend once again on hand labor. Some of our most important modern industries have been built upon a foundation of automatic machine development. Take, for example, the various ramifications of the foodstuffs business, especially the canning of perishable fruits, vegetables, meats, and the like. Without the remarkable machinery which makes, fills, and seals the cans, it could not exist. It could not get its products to market at anything like a cost which would be practicable. Imagine manufacturing, moulding, cutting, and packaging the output of one or two of the large chewing gum plants with hand labor, or the operation of a modern steel mill with brawn and the sledge.

Twenty years ago, a great deal of the modern industrial machine processes were carried on by hand labor. We lived, and ate, and slept, and were apparently just as happy then, but it is a certainty that we did not produce as much of anything in as short a time or with as little labor as we do today. Look back in the soap business only as far as 1900. Packaging was done by hand. Wrapping, filling, weighing, all were hand operations. Soap wrappers were paid two cents per box. Two cents for every hundred cakes. They worked ten hours a day and earned $1.50 to $1.75, which represented fair wages as they were calculated then.

If labor were hired to do the packaging job of the soap and allied industries today, it would probably cost $3.50 per day for the same girl who was content with $1.50 in 1900. This alone would cost about five cents per box for wrapping. In all probability, if we may judge by comparative standards of hand labor efficiency, the girl who wrapped 7,500 cakes per day then, would probably do about 6,000 at the present time. Then again, the machine-like character of the work would probably mean three or four times as great a labor turnover today as it did twenty-five years ago. Other than financial considerations are given to their employment by modern American labor. "Hum-drum" jobs are invariably discriminated against when labor rides on the crest of the wave.

Truly, it was lucky for the foodstuff industries and the soap maker with their myriads of small filling, weighing, cartoning, and wrapping operations, that the automatic machine age arrived when it did. Visualize, if you will, the present ills of the soap industry topped off with a nice little labor problem. And, then take off your hat to your machinery.

The Danger of Tradition

WHY is it that old, long-established firms of great financial strength will so frequently fade slowly out of business until they fail, while new firms with little money will grow strong and great during the same time and under identical business conditions? The answer probably lies in the very fact that a new firm is new and young, and has no past. It looks only to the future. The old business has traditions which date back for many years; it has a glorious past, which, in spite of the fact that progress does not lie behind, frequently attracts the gaze of those who should be looking ahead.

Traditions in business are fine things where they concern integrity, quality, and fair dealing. Outside of this, they are dangerous. Water which has flowed over the dam is gone and cannot come back to turn the wheel. Industrial greatness of the past will not keep a business running unless the things which made the firm great, are applied equally under constantly changing conditions. The man whose father built up a business on products which have since become antiquated, is a fool if he continues to buck the tide of industrial progress simply because of a glorious past, and states, "what was good enough for father is good enough for me"—and yet, it is being done every day. Failure after failure of old firms can be laid on the doorstep of this very cause.

How readily do you accept progress? When new devices or basic products of your business are quite generally accepted, do you still refuse to accept them because your old ones still work? In industry, nothing is constant; the firm which would not slip behind, must forge ahead. The traditions of a great past are of value only as a guide to the future. Where they interfere with progress, they are a menace.

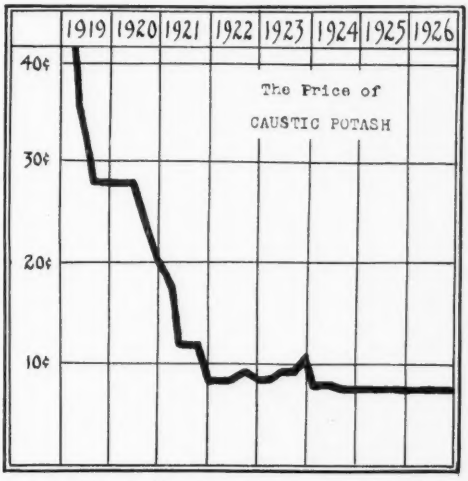
Benzine soap, mixed to form a creamy paste with equal parts of chloroform and pure benzol, is very effective in removing heavy grease spots from clothing and other cloth materials.

The Caustic Potash Situation

How the Present Market Is Bound Up With Manufacture, Finances and Prices in Europe

By J. F. Wischhusen
President, The Superfos Company

THE present situation in caustic potash can be traced directly to two things, financial difficulties of the German potash group as a result of post-war conditions, and a steadily increasing consumption of caustic potash in proportion to other potash salts. At the present time, there is a world-wide shortage of caustic potash. The shortage is due to the inability, or refusal, of European manufacturers to increase their production to meet growing demand, owing to the inadequate return which they are receiving on their investment in the light of present financial conditions. Both crude potash prices and prices for caustic potash have been advanced in all European countries, the caustic advance naturally following higher cost of crude salts. In the United States, prices are as yet unchanged although it is likely that about a five per cent advance in caustic potash will take place at the beginning of the second quarter of the year. This is based on a cost of crude potash salts in Europe some 9½ per cent higher for 1927 than in 1926.



Stringency in caustic potash supplies has not developed over night. It is the result of several years' development. The termination of the war found the German potash industry, along with other industries, face to face with a financial problem which came to a head with the financial debacle of two or three years ago. Money to repair and replace old equipment was not available. Expansion was impracticable owing to the great cost of electrolytic equipment for the manufacture of caustic potash. When the Potash Syndicate floated a loan of $50,000,000, this meant that every dependent branch of the potash industry would have to carry its share of the interest burden and amortization. With this condition existing in the case of crude materials, and prices which have been held to be too low for caustic potash, the incentive of the latter manufacturers to expand their output to take care of growing industrial demand for caustic, has been entirely lacking.

During recent years, several attempts have been made to start new enterprises in the electrolytic manufacture of caustic potash. These have all met with failure. The extremely technical nature of the business and the necessity for uninterrupted operation as a means of maintaining quality and economic production, has been the chief stumbling block. Competition, sufficiently excessive to necessitate the closing down of a plant, even for a short time, is apt to be almost fatal. To renew operations not only means difficulties with quality for some time, but it entails heavy expense which requires a long time to overcome. Thus, as we enter 1927, we find an industry unable to meet as it should expanding demand, due to its weakened condition as a result of low prices in the past, high manufacturing costs, and financial difficulties. Until these are corrected, present conditions of supply will remain unchanged. More economic production and lower prices are, quite obviously, out of the question.

Background of Potash Production

WHILST potashes were used as early as the second century in the Mediterranean cities of that time in the form of wood-ashes for the manufacture of soaps, glass and medi-

cines, the commercial development of a potash industry had its inception only in comparatively modern times, about 1858, through the discovery of easily accessible and abundant deposits in the Stassfurt district of Germany. Until then, wood-ashes, obtained by the destruction on a large scale of forests in Europe, Russia, the United States and Canada con-

Air view of the plant of the Consolidirte Alkaliwerke at Westeregeln, Germany.

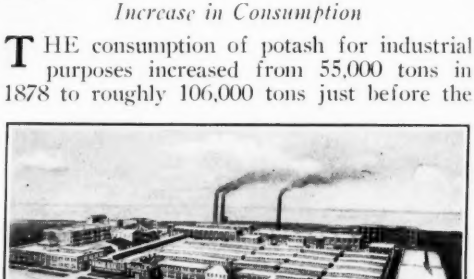
stituted the main source of potash in the form of crude carbonate of potash of low test. The modern method of production, which is at present almost exclusively used, however, is the electrolytic method of producing caustic from potash chloride which is practically identical with the electrolytic method of the production of caustic soda from common salt.

Though the sources of potash are many, and universally distributed, as for instance, sea water, all vegetation, practically the entire mineral crust of the earth which on an average contains 2.4% of pure potash in the form of silicates, nevertheless an organized potash industry for the regular production of potash salts on a commercial scale has only proved feasible in a very few places. The principal ones of these is in the Stassfurt district of Germany and in Alsace in France. It is estimated that the Stassfurt deposits alone represent a tangible reserve of 10,790,000,000 cubic meters of something like 20 billion metric tons of potash salts in an easily soluble form, which at the present rate of consumption is sufficient to supply the world for more than 2000 years with its requirements not only for industrial and medicinal, but also fertilizer purposes. It is therefore only natural that the exploitation of these potash deposits has been scientifically developed.

There are many known concentrated sources of potash in various parts of the world, including our own country, and undoubtedly just as many deposits still to be discovered, but nature seems to have favored the Stassfurt district with so many advantages that even the high prices during the war were not able to develop a potash industry sufficient to supply even approximately local requirements. National independence of foreign potash in any country is therefore still an unsolved problem except for Germany and France. The cost of transportation in America for instance has proved such an impediment as to have afforded Germany a natural protection on her U. S. market for potash salts over actual production of potash at the Pacific Coast or potential production in Colorado, Texas, or New Jersey. It is for instance, cheaper by reason of waterways in Germany and ocean shipping facilities to transport crude potash from Stassfurt to New York than to transport the same article by truck from Staten Island to Manhattan, or from the Battery to the Bronx, or by rail from New York to Philadelphia.

Increase in Consumption

THE consumption of potash for industrial purposes increased from 55,000 tons in 1878 to roughly 106,000 tons just before the



View of the plant of the Niagara Alkali Company at Niagara Falls, N. Y.

war. The consumption fell off perceptibly during the war years to roughly 45,000 tons. Since the war, this increased to 53,000 tons in 1920. These figures include the consumption of all potash salts other than for agricultural purposes, hence, therein are contained the requirements of potash for the manysided technical and medicinal activities of the economic life of today the world over. The tonnage is expressed in terms of pure potash (K_2O) which would be equivalent to two tons of caustic potash for every one ton of pure potash, and it is conceivable that the most of this tonnage could be consumed in the form of caustic potash. It is reasonable to suppose that the saturation point will not be reached until the quantity consumed in 1913 is again reached and exceeded, and therefore, it is logical to expect increasing demand for caustic potash for years to come.

The principal manufacturers of caustic potash are quite naturally situated near the potash

mines in the Stassfurt district, but there are also factories in the U. S. A. and in Sweden.

The present manufacturers are: 1. Chemische Fabrik Griesheim-Elektron, Frankfurt a. M. (now a part of I. G.-Farbenindustrie). 2. Consolidirte Alkaliworke, Westeregeln. 3. Salzbergwerk Neustassfurt, Sehnde b Hannover. 4. Chemische Fabrik Buckau, Ammendorf. 5. Koyholyt A. G. (Stinnes; formerly Wildermannwerke), Luesldorf. 6. Chemische Fabrik v. Meyden, Dresden-Radebeul. 7. A. G. fur Onilinfabrigation, Wolffn. (now a part of the I. G. Farbenindustrie). 8. Verein fur Chemische und Metallurgische Produktion, Karlsbad. (works at Aussig, Czechoslovakia). 9. Niagara Alkali Co., Niagara Falls, N. Y.

Process of Manufacture

ABOUT twenty years after the initiation of potash mining in Germany, chemical engineers worked out the so-called diaphragm process which is still in use today in one of the leading plants. At the beginning, caustic potash was made in Southern Germany by this process. Later, it proved to be more advantageous to establish large electrolytic plants near the potash mining districts. All the processes have as a principle the splitting of potassium chloride (KCl and water (H_2O) into caustic potash (KOH,) chlorine gas (Cl) and hydrogen gas (H). The electric current runs from copper electrodes through the potassium chloride brine, to carbon electrodes. The latter are mostly bought in America (Acheson). No European manufacturer turns out as high class carbon electrodes as are made in this country. Many hundreds of tons of copper are required to build even a small electrolytic plant. It is therefore necessary to invest millions of dollars in a plant of even moderate size. Another necessity is the availability of extraordinarily cheap electric current.

Electrolytic plants have therefore been erected only in localities where there is either cheap water power or very cheap coal. At Bitterfield, Westergeln, and Ammendorf, large deposits of bituminous coal provide cheap fuel. The coal occurs near the surface which greatly facilitates mining. Next to the mines, large power plants have been erected, from whence a current of 70,000 volts or more is conducted into the nearby located electrolytic plants. The electrolytic "bath" yields a product which is far from being finished. It contains not more than about 12% to 14% caustic potash. To produce electrolytically a pure grade of this crude lye, is a problem which it took years to solve. It requires the highest class of chemically trained personnel to operate a potash electrolysis. There is perhaps not a more difficult field to be found in technical chemistry than the elimination of impurities from caustic potash baths. An important factor is the careful selection of the raw material. Needless to say, the potash mining and refining concerns which manufacture caustic potash at the same time have a distinct advantage in this respect because they are able to select the purest parcels of potassium chloride out of their own production for the use in their electrolytic plants. Only one or two manufacturers of caustic potash enjoy this advantage whereas the others must buy their raw material from competitors.

U. S. Imports of Caustic Potash
(In pounds)

1907— 7,483,834	1913— 8,895,805
1908— 5,947,182	1920— 1,712,319
1909— 7,032,659	1921—10,910,399
1910— 8,793,146	1922—13,858,962*
1911— 7,424,052	1923—10,857,354
1912— 8,420,052	1924—12,629,739
	1925—12,256,371

*Immediately preceding passage of Fordney Tariff Act of 1c per lb. import duty.

In 1924, carbonate of potash imports dropped 27% under 1923. In the same year, 1924, caustic potash imports increased 17% over 1923.

A highly purified grade of potassium chloride is used. It is obvious that potassium chloride, being a product of nature, never runs quite uniform. Actual potash miners who make caustic at the same time, are in the habit of reserving certain parts of their potash deposits which they find especially suitable for the use in their electrolyses. When the lye is found satisfactory, the complicated process of evaporating is begun. First the brine is condensed to about 50° Be. Formerly, all caustic potash was sold in this liquid form. It was however found too expensive to pay transportation charges on 50% of water, and besides the packing question involves numerous difficulties. In cold weather, some of the caustic potash contained in the lye crystallizes out.

Manufacturers have therefore gone over to a higher concentration of their caustic potash; the water is almost completely evaporated. Most producers concentrate their material to a caustic potash content of 88%. One or two manufacturers turn out goods testing 90%, and there is even one maker where material runs as high as 91%. This is the highest which can economically be achieved. Further concentrated caustic potash can be made only under temperatures which virtually destroy the valuable equipment.

It has at times been the most serious problem to find an outlet for the large quantities of

(Continued on Page 27)

INTERNATIONAL

SALT CRYSTALS

Science is an ingredient added to the production of International Salt.

That is why it is a quality salt—why industrial users may depend upon it for positive results.

Each shipment of International Salt—yesterday, today and tomorrow—represents purity.

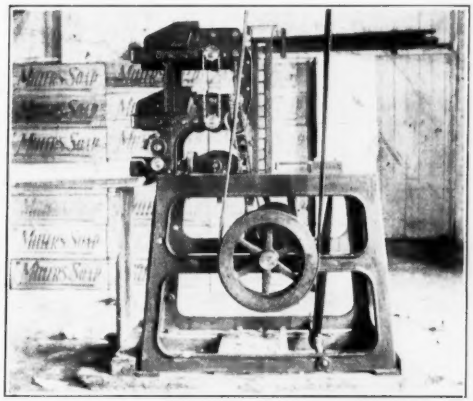
We can satisfy your requirements in every particular.

INTERNATIONAL
SALT COMPANY, Inc.
475 Fifth Avenue, New York

The Development of Machine Wrapping

A Discussion of Toilet and Laundry Cake Soap Wrapping, Waxpaper Wrapping and Tight Wrapping

SOAPMAKERS save seventy-five per cent of their wrapping costs through the use of modern automatic machinery instead of hand labor, according to conservative estimates. This is based on the cost of wrapping the average size rectangular shaped toilet soap, figuring the hand labor at three dollars a head per day and the machine cost, including depreciation, interest, fixed charges, etc., at two dollars a day. The average machine will turn out thirty gross of soap a day, whereas ten gross a day would be a very good average production for hand wrapping. This does not take into consideration the employment problem, in the case of hand labor, where the cost and trouble are quite important factors. Even when hand wrapping was quite general, the labor turnover was abnormally high and in this day and age it would doubtless be considerably higher, considering the nature of the work.

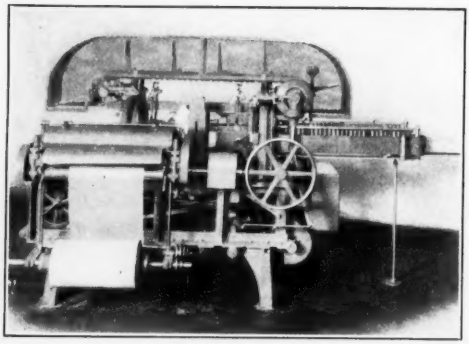


The original machine used for wrapping soap. First used in 1902 for Miller's Naphtha Soap. Photo courtesy Ferguson & Haas, Inc.

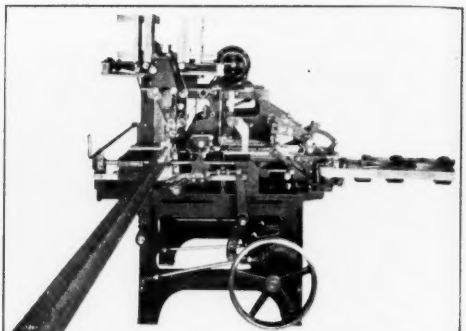
The development of automatic cake wrapping machinery has all come about within the last twenty-five years. The first cake wrapping machine was built in 1902 in shape for the market. The American Wrapping Machine & Box Co. was the builder, installing the first machine in a Lancaster, Pa., soap factory. "Millers Naphtha Soap" is generally believed to have been the first machine wrapped product. Fels, Kirk, Colgate and Kirkman installed machines shortly thereafter. The American wrapping machine was later taken over by Condon and its development was continued. About 1903, the United Wrapping Machine Co. had equipment ready for the market, which differed from the original machine in that it boxed as well as wrapped the cakes. This unit was improved considerably and found a fair market until 1915 or 1916, when it disappeared from the market in its original form. All the early machines used steam or gas power.

These early machines would turn out around 400 boxes of soap a day, representing a great saving over hand labor. The average production of a hand wrapper was around 75 boxes a day, the rate of payment being generally about two cents a box of 100 cakes. Ten hour days were the rule, with from $1.50 to $1.75 being good pay for the boys and girls employed to wrap the soap. Where the speed of the first automatic machinery was only between sixty and seventy cakes a minute, even the older types in use today will turn out between 400 and 450 boxes of laundry soap in an eight hour day, with the latest models capable of wrapping from 550 to 600 boxes. Production of toilet soaps runs slightly under these figures and varies according to size and shape.

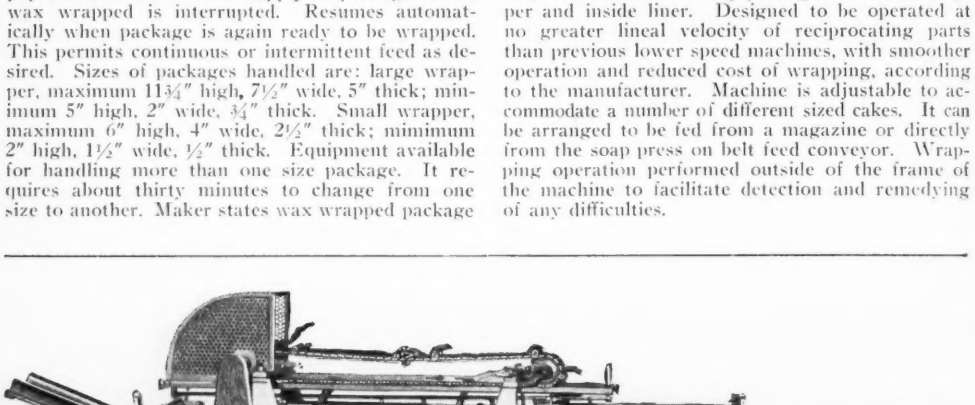
THE greatest troubles in early automatic wrapping, aside from mechanical difficulties, were in securing proper wrapping papers. There was no adequate supply of the correct size rolls and even those available were not uniform. Oftimes the printing was done irregularly, with the reading matter appearing in varying positions on the various wrappers. When soap was wrapped by hand, this was not so great a disadvantage, as the wrappers could see the printing through the paper and could place the cake in the proper position. Machines, of course, could not do this, and the result was cakes wrapped with reading matter turning up in various odd and unusual places. With the more general use of automatic machinery, the printer improved his work and



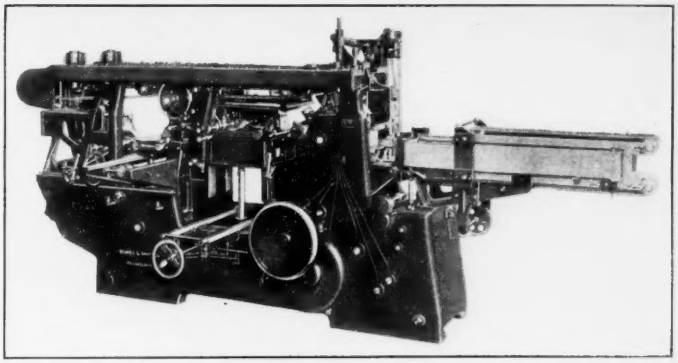
THE Johnson Automatic Wax Wrapper of the continuous motion type which produce 50 to 70 packages per minute by hot self-seal method according to size and weight of package. No operator is required. Runs by one H. P. individual motor on floor space 9 x 9 feet. The supply of packages controls the supply of wax paper. No paper is cut or fed when supply of packages to be wax wrapped is interrupted. Resumes automatically when package is again ready to be wrapped. This permits continuous or intermittent feed as desired. Sizes of packages handled are: large wrapper, maximum 11¾" high, 7½" wide, 5" thick; minimum 5" high, 2" wide, ¾" thick. Small wrapper, maximum 6" high, 4" wide, 2½" thick; mimimum 2" high, 1½" wide, ½" thick. Equipment available for handling more than one size package. It requires about thirty minutes to change from one size to another. Maker states wax wrapped package is waterproof, keeps in moisture of contents, sift-proof and stronger than plain carton.



THE Ferguson & Haas machine for wrapping toilet soap and guest cakes. Operates at a normal speed of 125 to 175 per minute according to size and type of cake, and kind of wrapper. It makes the usual cake soap package of outside wrapper and inside liner. Designed to be operated at no greater lineal velocity of reciprocating parts than previous lower speed machines, with smoother operation and reduced cost of wrapping, according to the manufacturer. Machine is adjustable to accommodate a number of different sized cakes. It can be arranged to be fed from a magazine or directly from the soap press on belt feed conveyor. Wrapping operation performed outside of the frame of the machine to facilitate detection and remedying of any difficulties.



AMERICAN Machine & Foundry Standard wrapping machine for wax wrapping. Wax wraps 45 to 55 cartons per minute according to size, weight and style. Uses hot self-seal for sealing wrapper. Uses 30 lb. self-sealing wax paper. Takes packages on automatic adjustment, that is spring control of variable size packages within following limits: width 3" to 7"; height 3" to 5¼". Slight manual adjustments in length from 7" to 13½" long. Automatic insert attachment and labeling attachment available. Floor space set up, 12' 4" long, 5' 8" wide, 5' high. Takes packages direct by conveyor from cartoning machine. Equipped with automatic stop for packages introduced in wrong position.

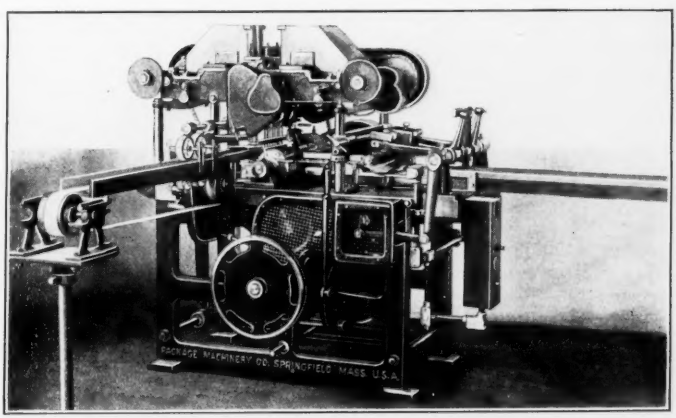


THE Stokes & Smith Automatic Package Wrapping Machine for producing a tight wrapped package. The package as produced by this machine consists of a plain chip or news board carton about which a printed or lithographed paper wrapper has been glued to its entire surface. Machine is completely automatic, taking paper wrapper with thin coating of adhesive on blank side, folding about carton, and sealing tightly on all six sides. Takes 45 to 60 minute based on weight and size. Maker claims tight wrapped package costs little more than printed carton and less than wax wrapped package. He states that it is especially designed for soap powders and products liable to sift, and gives advantage in appearance of printing or lithographing on paper instead of carton board, and greater strength due to tightly glued wrapper and overlapping of wrapper at corners.

today, this trouble has been eliminated. The vast variety of colors and designs in toilet soap wrappers, readily available today, could not be secured twenty years ago, when a two color wrapper was the most that any soap might boast.

In the line of mechanical difficulties, the hardest thing for the machinery manufacturers to build was a street paper feeder capable of working steadily at a high speed. This has been long since overcome and, while machinery builders are constantly endeavoring to attain higher production with their machines, the present models are eminently satisfactory in most instances and are certainly saving their users substantial amounts of money every day. The appearance of machine wrapped cakes is also being improved continuously. Neater end folds are one example of what is occupying the wrapping machinery developer's attention. The wrapping of oval cakes is an altogether separate part of the wrapping machinery manufacturer's business. As a matter of fact, it has only been since 1917, that it has been possible to wrap oval cakes by machine, practically fifteen years having elapsed between the building of the first rectangular cake wrapping and oval cake wrapping equipment. The first machine turned out about 35 oval cakes of toilet soap a minute, the speed having been increased to between 40 and 42 cakes in the more recent models.

(*Continued on Page 75*)



THE recently developed high speed wrapping machine of the Package Machinery Co., Springfield, Mass. This is their Model N-3 which wraps laundry and regular rectangular toilet soaps at a rate of 190 per minute. Compares with their previously developed models which worked at a speed of 100 to 120 cakes per minute. It makes the standard package of outer printed or lithographed wrapper and inner liner. Manufacturer states that it is not only faster, but makes a neater wrapped package than the older machines, the speed having been developed through reduction in number of moving parts. Machine is completely automatic, taking cakes directly from conveyor from the soap press and delivering on conveyor for boxing.

Antoine Chiris Company

147-153 Waverly Place, New York City

Telephones:
Spring 1187-1188

Cable Address:
"Chiris" New York

Manufacturers of

Natural Floral Products
Essential Oils Aromatic Chemicals

Producers of

Perfumers' Exotics
Vanilla Beans Olive Oil

Inquiries other than those of the United States and Canada should be sent direct to

Etablissements Antoine Chiris

51 Avenue Victor Emmanuel III, Paris, France

WORKS

GRASSE, FRANCE

L'Abadie, France	Sousse, Tunis	Bambao, Comores Is.
Le Vignal, France	Bambari, Fr. Congo	Langson, Tonkin
Barreme, France	Boufarik, Algeria	Soerabaya, E. I.
Castellane, France	Tamatave, Madagascar	Nyanza, E. Africa
Puberclaire	Nossi Be, Madagascar	Chung-King, China
La Roque-Esclapon	Vigone, Italy	Ta Tsien Lou, China
Cayenne, Fr. Guiana	Rahmanlare, Bulgaria	St. Denis, Bourbon Is.

Les Hesperidees, Reggio, Calabria, Italy

Established ***in 1768***

CHICAGO OFFICE **510 North Dearborn Street**

The Darkening of Toilet Soaps

Perfumes Blamed, but Infrequently the Cause— Little Really Known and Research Badly Needed

By E. Schotte
of the Lavo Company of America

ONCE in a while, the soapmaker is troubled by the fact that dark spots occur in toilet soaps. The first thing invariably is to blame the perfume. The perfumer contradicts it and that is all. It is astonishing that so little is known about this important subject. Ernest Schiftan in a speech before the Society of Soapmakers and Perfumers* discusses this problem. He puts the chief blame on the perfumes. Under influence of light and atmosphere many perfumes deteriorate. The essential oils themselves become dark or the new formed oxidation products react with the soap with the result of darkening or dark spots.

Some of the more important perfumes which are subject to the influence of the atmosphere are eugenol and isoeugenol, indol, phenyl acetaldehyde, vanillin, heliotropin, cinnamic aldehyde and hydroxycitronellal and the oils containing the above mentioned products. Also oil of lavender and all artificial musks have a tendency to form dark spots. Other essential oils are easily attacked by those named above and combinations containing them should be used with care. Used alone they will not harm. Anisic aldehyde (aubepine) and coumarin belong to this second group. Methyl anthranilate is very sensitive and belongs partly to the first group.

Terpenes being easily resinified and therefore good oxygen transmitters, may cause the forming of oxy-fatty-acids in a completely saponified soap. The oxy-fatty-acids have a rancid smell and dark color. Pine needle soap containing pine needle oil, the main part of which is a terpene, will get rancid after some time. The same is true of eau de cologne soaps made up with a preponderance of oil of citronella. The stability to the influence of the atmosphere can be tested by bubbling air through a sample of the material. If it is necessary to use an unstable product, take the least possible amount and compound it with a fixative.

Blame Oil Citronella

SCHIFTAN'S conclusions are mostly theoretical, but H. Mann gives in his excellent book, "Die Moderne Parfumerie," more facts. Although he claims that changes in the soap on aging are due more to the soap itself than to the perfume some experiments were made to investigate the influence of perfume on white soaps. The oils were added to a neutral white base, and after six months, the pieces were examined. In some respects, his results agree with Schiftan, e. g., bad action of oil of citronella. Pine needle oil, however, has no bad effect according to him. He too points out that lavender, although frequently used, makes a white soap yellow with light spots.

The speech of Schiftan was followed by a discussion in which several experienced soapmakers and other prominent people in the German soap industry took part. One claimed that once soap had become discolored, according to his experience, although other batches with perfume from the same lot had given no trouble. Quick cooling and other physical influences seem to have an effect upon the soap, according to others. Some found the presence of oxy-fatty-acids in the raw material objectionable. It appeared finally that nobody actually knew the real cause of dark spots in toilet soaps. Some blamed the chemists for not having solved this problem.

Perfume Generally Blamed.

IN AMERICA, the general opinion is that the perfume is the cause of the trouble. Once a manufacturer had a batch of soap spoiled by black spots. A sample of the perfume was sent to a professor of chemistry. He found a very slight acidity in the perfume and he declared this to be harmful to the soap. The supplier of the perfume called me in the case. I analyzed a cake of the soap. A slight excess of carbonate was found, so the acid must have been neutralized. On further analyzing I found that the soap contained traces of lead and that the soap was colored with ultramarine. Ultramarine contains sulfur, so the most logical thing to believe was that the spots were caused by the chemical combination of lead and sulfur, lead sulfide being black.

*Seifensieder Zeitung, 1926, page 257.

Astonishing was the fact that the technical men of the soap company did not seem to know that the Zinc oxide used contained lead oxide. This was the second time that I found zinc oxide containing lead used in soap. The product was bought at a lower price than the lead-free oxide. This is a striking example of how some soap companies seem to be so much more interested in price than in quality. Everybody knows that most perfume dealers have to adulterate their materials to meet the price soap companies are willing to pay.

Improper Bleaching Cause

ANOTHER cause for discoloration may be found in bleached soaps, where the bleaching is not done with proper care. A case recently brought to my attention relates to darkening of soaps made with acid coconut oil. I have not been able to get samples to determine the real cause, but it induces me to point to the negligence in some plants where fatty acids are used. Do not store fatty acids in iron tanks. When saponifying, put first the alkali in the kettle or crutcher and add the fatty acids to this. I do not know if fatty acids will attack iron, but they surely will act on any rust present, and iron soaps certainly will cause trouble, if not by darkening then in other ways.

The problem of dark spots and afterdarkening of soaps is not yet solved. Above, I have given only a few different ideas about it. One chemist told me that he believed that bacteria were to blame for the trouble and he claimed that he has found some proof for his theory. A thorough investigation is needed. First, to determine what the black spots are and second the cause of their forming.

Cottonseed oil stocks increased sharply between Nov. 30 and Dec. 31, according to the official report, released late last month. Crude oil, on hand Dec. 31, totaled 155,455,120 pounds, an increase of close to twenty-five million pounds during the month. Stocks of refined oil jumped almost a hundred million pounds, in the same period, to 332,343,692 pounds. Complete statistics, showing comparisons with conditions a year ago, follow:

	Season	On hand Aug. 1	Produced Aug. 1 to Dec. 31	On hand Dec. 31
Crude oil pounds	...1926-7	8,280,561	1,011,663,939	155,455,120
"	...1925-6	4,847,333	870,543,254	118,719,041
Refined oil pounds	...1926-7	145,670,884	773,185,205	332,343,692
"	...1925-6	173,549,345	659,816,748	168,898,455

Caustic potash production by La Fabrique de Produits Chimiques de Thann et de Mulhouse in France is reported being rapidly expanded to take care of increased demand.

Effective Strainer For Oil Tanks

A simple and effective type of strainer is often required in stock and oil compounding tanks in the average plant. Many tanks and kettles are 'dished' at the bottom with the outlet pipe at the center of the dish. With such an arrangement, foreign matter is carried into the draw-off and pump suction lines, obstructing the free opening or closing of valves, and sometimes may lodge in the pump itself, necessitating a shut-down.

After several years of experience with various types of strainer, the following has been found quite efficient. A rectangular piece of springy wire mesh is rolled a few times around a short length of pipe which is a size or two smaller than the tank outlet; the pipe is then withdrawn from the screen cylinder and one end of the latter is inserted in the draw-off at the bottom of the tank. It is pushed down far enough to be firmly held in place while allowing the other end of the roll to extend several inches above the dish. The natural springiness of the mesh causes it to uncoil and grip the outlet pipe snugly.

By selecting material and mesh of proper aperture, and varying the number of layers wrapped on the pipe mandrel, the filter is adaptable to many conditions for oils and chemicals. In practice it has not been found necessary to close the upper open end of the screen—only floating material such as corks or wood bungs can enter via this opening, and then only when the surface of the tank contents is even with the top of the strainer. The chances of this happening are so small as to be negligible. Withdrawal of the arrangement is quick and easy for cleaning, and for re-use it is convenient to flatten the mesh, then re-roll to the opposite curvature.

Caustic soda production, in 1925, amounted to 487,145 tons, valued at $27,392,352, representing a 13% increase over 1923's production of 430,961 tons, according to data collected at the biennial census, by the Department of Commerce. Soda ash, to the amount of 1,368,660 tons and with a value of $32,243,941, was produced in the same year, an increase of 8.7% over an output of 1,258,780 tons in 1923.

Soap exported to Panama will pay a duty of between ten and fifteen cents a kilo, on arrival, if a recommendation made by that country's Committee of the National Assembly is acted upon favorably in the Assembly. This duty is to be in the nature of protection for domestic soapers.

The Caustic Potash Situation

(*From Page* 19)

chlorine which are necessarily yealded wherever caustic potash is made. Chlorine cannot very well be stored in large quantities. It is obvious that any irregularities in the marketing of either caustic potash or by-products will cause very serious disturbances. Electrolytic manufacturers are always in a much more precarious position than manufacturers of only one product.

To insure uniform marketing, all European caustic potash manufacturers with the exception of one (Westeregeln) have been combined in a syndicate in which every member is guaranteed a certain quota, i. e. the assignment of a fixed percentage of all sales. This syndicate used to operate under the lead of the Chemische Fabrik Griesheim Electron. In 1924, the big outsider, Westeregeln, joined this combine after a fierce price war. As to future price developments, there seems to be no outlook of lower levels than those prevailing today. There might, of course, be a decline in crude potash salts which would automatically lead to cheaper caustic potash prices, but this is extremely unlikely.

Bulgarian Soap Industry Growing

Before the war there was no organized manufacture of soap in Bulgaria, a great deal of the soap having been made individually, by the peasant, for home consumption, the balance having been imported, largely from France. Since the war, however, the manufacture of soap has attained some importance in Bulgaria and has more or less recognized as a real industry. In 1924 there were 13 factories producing soap Bulgaria, close to two million kilos having been manufactured altogether. In 1925 well over two million kilos were made locally. The domestic product is generally inferior to the imported article, French soaps, in particular, being well thought of for their quality. Greece, Holland and England also ship soaps into Bulgaria, but do not approach the French tonnage. The duty amounts to 25 gold levas per 100 kilos, plus twenty per cent of that rate to cover other taxes.

Metal polish exports totaled 156,987 pounds, valued at $22,544, in November, 1926. Shoe polish exports were valued at $79,081, in the same month, reaching 258,170 pounds in quantity. All other polish exports amounted to 391,003 pounds, sold for $64,075.

American Soaps in the Philippines

Although exports of American toilet soaps, to the Philippines, showed a remarkable increase in 1926, reports indicate that a considerable undeveloped market still exists there. Toilet soap manufacture, in the Philippines, amounts to little, owing to the difficulty with which suitable raw materials, particularly tallow, may be secured. Shipping tallow from far away points is too expensive and Australian goods are reported as being too green to use in good quality toilet soaps.

To appeal to the average Filipino, a toilet soap should be brightly colored and strongly scented. Attractive and distinctive packaging also adds materially to sales. Advertising in local papers and through other media is strongly recommended and is absolutely necessary to attain any wide distribution. In short, aggressive modern sales methods, backed up with a product, striking in appearance and possessing a distinctive odor, should mean larger American toilet soap sales in the Philippine Islands.

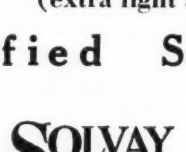
Auto soaps are practically unknown in the Islands. Reports indicate that there are none on the market. The 12,000 or more cars operated there are cleaned only with water, so activity along this line might be profitable to American soapmakers. This, along with toilet soaps, is practically the extent of the Philippine market for imported soaps. While there is only one large Filipino soap manufacturing concern there are fifty or more small companies and with so much cheap labor readily available they are able to supply most of the laundry soap needed. The small manufacturers operate kettles that hold between 5,000 and 10,000 pounds of soap, the heat being furnished by an open fire. After the boiling process has been completed the soap is ladled into wooden boxes, allowed to set and is then cut into any desired shape or size. Prospective buyers pick out the size they want and it is wrapped in newspaper or banana leaf, this method of wrapping also having a distinct tendency toward keeping prices down.

The two sandalwood-oil factories in Mysore State, India, distilled 1,811 tons of sandalwood during the fiscal year ended March 31, 1926, as against 1,697 tons during the previous year. The output of oil amounted to 195,867 pounds as against 172,988 during 1924-25. The sale of oil during the past year attained a record—195,648 pounds—and the gross realizations amounted to 3,106,000 rupees.

SOLVAY

Every product sold by Solvay strengthens the reputation of both seller and buyer. The reason? -- the maintenance of fair prices, courteous treatment, prompt service and products of known dependability.

76% Caustic Soda
Solid—Flake—Liquid
Light 58% Soda Ash
"Fluf" (extra light Soda Ash)
Modified Sodas



SOLVAY SALES CORPORATION

Alkalies and Chemical Products
Manufactured by The Solvay Process Company

40 Rector Street **New York**

Boston Syracuse Chicago Indianapolis Cleveland
Cincinnati Pittsburgh Detroit Philadelphia
Kansas City St. Louis

Specifications For Phosphate Cleaner

Bureau of Standards Issues Tentative Requirements for Trisodium Phosphate Cleaners for Government

A TENTATIVE draft of proposed specifications for trisodium phosphate cleaners for Government purchase has been issued by the Bureau of Standards. The specification has been formulated by the Technical Committee on Soaps and Soap Products of the Federal Specifications Board and is submitted for consideration of manufacturers before promulgation and use by various Government departments. Comments or criticisms should be addressed to the attention of the Board.

The specifications follow:

Phosphate cleaner shall be a white, uniform product in finely granulated form and shall contain not less than 95 per cent of crystalline trisodium phosphate shall conform to the following requirements: 1. It ($Na_3PO_4 \cdot 12H_2O$). Phosphate cleaner as received shall be a white, uniform, finely-granulated product. 2. Total alkalinity to methyl orange indicator, calculated as Na_2O, shall be not less than 15.5 per cent or more than 20 per cent. 3. Phosphoric anhydride (P_2O_5) shall be not less than 17.7 per cent. 4. Free alkali, calculated as sodium hydroxide (NaOH), shall not exceed 0.5 per cent. 5. Matter insoluble in water shall not exceed 0.1 per cent.

Methods of Testing

Sampling: (a) *When Packed in Cans or Cartons.*—One can or carton shall be taken at random from not less than 1 per cent of the vendors' shipping containers, provided such containers contain not less than 50 pounds each. In the case of smaller containers a can or carton shall be taken at random from each lot of containers totaling not to exceed 5,000 pounds. The total sample shall in all cases consist of not less than three cans or cartons taken at random from separate containers. With very large lots, where the sample drawn as above will amount to more than 20 pounds, the percentage of packages sampled shall be reduced, so that the amount drawn shall not exceed 20 pounds. Wrap the individual cans or cartons tightly in paraffined paper at once and seal by rubbing the edges with a heated iron. The inspector should accurately weigh each wrapped can or carton, record its weight and the date of weighing on the wrapper, place the wrapped cans or cartons in an air-tight container, which should be nearly filled, seal, mark, and send to the laboratory for test. Samples should be kept cool until tested. The seller shall have the option of being represented at the time of sampling and when he so requests shall be furnished with a duplicate sample.

(b) *When in Bulk.* A grab sample of not less than one-half pound shall be taken at random from not less than 1 per cent of the vendors' shipping containers, provided such containers contain not less than 100 pounds each. In case of smaller containers a grab sample of not less than one-half pound shall be taken at random from each lot of containers totaling not to exceed 10,000 pounds. The total sample shall in all cases consist of not less than three grab portions taken at random from separate containers. With very large lots, where the sample drawn as above will amount to more than 20 pounds, the percentage of packages sampled shall be reduced, so that the amount drawn shall not exceed 20 pounds. The inspector should rapidly mix the sample, place in an air-tight container, which shall be filled, seal, mark, accurately weigh, record its weight and date of weighing on the package, and send to the laboratory for test. Samples should be kept cool until tested. The seller shall have the option of being represented at the time of sampling and when he so requests shall be furnished with a duplicate sample.

Testing: (a) *Preparation of Sample.* Note the color and the condition of sample. Rapidly mix the sample; if desired, quarter down to about 1 pound, and weigh out all portions for analysis at once. Unused portions of the sample used for analysis shall be preserved in an air-tight container in a cool place.

When a determination shows non-conformity with specification, a duplicate shall be run.

(b) *Total Alkalinity.*—Transfer 2 g of the sample to a 600-cc beaker, dissolve in about 400 cc of water, add 3 drops of methyl orange solution and titrate to the end-point with 0.5 (NH_2SO_4). Calculate the percentage of total alkalinity as Na_2O (1 cc 0.5 N $H_2SO_4 = 0.0155$ g Na_2O).

(c) *Phosphoric Anhydride.*—Transfer 5 g of the sample to a one-liter volumetric flask, dissolve in water, dilute to the mark with water, and mix. Pipette a 50-cc aliquot of this solution (corresponding to 0.25 g of the sample) into a 300-cc Erlenmeyer flask, add a small piece of litmus paper and carefully acidify with dilute HNO_3 then add 25 cc of HNO_3 (sp. gr. 1.42) and 25 cc of water. Add to the solution 40 cc of NH_4OH (sp. gr. 0.96) and 50 cc of molybdate solution, stopper, shake for 10 minutes, and let stand at room temperature until the precipitate settles. Filter through an 11-cm filter paper of close texture, wash the flask and precipitate five times with 15-20 cc portions of a 1 per cent solution of potassium nitrate; then wash the filter paper, containing most of the precipitate, five times with like portions of the same solution. The paper should, of course, be carefully washed each time from the rim downwards and then allowed to drain completely before washing with the next portion of solution. The wash solution, as well as all others subsequently used, must be free from CO_2. Return the paper and precipitate to the flask, add enough 0.3 N NaOH to decompose the precipitate and then approximately 2 cc in excess. Dilute with 25 cc of water, stopper, and shake until the precipitate is dissolved. Wash off the stopper, dilute the solution to about 150 cc with water, add 6 drops of a 1 per cent solution of phenolphthalein, and discharge the pink color with 0.3 N HNO_3. Finish the titration by adding 0.3 N NaOH until the reappearance of the pink color. Subtract the volume of 0.3 N acid used from the *total* volume of 0.3 N NaOH used and multiply the remainder by the titer of the 0.3 N NaOH solution. Calculate the percentage of P_2O_5.

(1 cc 0.3 N NaOH = 0.00093 g P_2O_5. P_2O_5 x 2.309 = Na_3PO_4. P_2O_5 x 5.352 = $Na_3PO_4 12H_2O$).

(d) *Free Alkali.*—Digest hot 5 g of the sample with 200 cc of neutral absolute ethyl alcohol and filter through a filter paper neutral to phenolphthalein solution, protecting the solution during the operation from CO_2 and other acid fumes. Wash the residue with hot neutral absolute alcohol until the washings are neutral to phenolphthalein. Titrate the filtrate, using phenolphthalein indicator, with 0.5 N H_2SO_4 solution, and calculate the alkalinity to sodium hydroxide (1 cc 0.5 N acid = 0.02 g NaOH).

(e) *Matter Insoluble in Water.*—Transfer 10 g of the sample to a 600-cc beaker, add about 400 cc of water, and boil the solution for 10 minutes. Filter on a weighed Gooch crucible with an asbestos mat, wash thoroughly with hot water, dry the crucible and residue at 105-110°C for 3 hours, cool and weigh. Calculate the percentage of matter insoluble in water.

Reagents: (a) *Standard Sulphuric Acid Solution.*—0.5 N, or about 25.8 g strong sulphuric acid (sp. gr. 1.84) diluted to 1 liter. Standardize against standard sodium hydroxide solution that has been standardized against Bureau of Standards standard benzoic acid.

(b) *Ammonium Hydroxide Solution (Specific Gravity = 0.96, or approximately 6 N).*—Mix 400 cc of NH_4OH (sp. gr. 0.90 with 600 cc of water. Check with a hydrometer or by titration.

(c) *Molybdate Solution.*—Mix 100 g of pure molybdic anhydride or 118 g of 85 per cent Molybdic acid with 400 cc of water and add 80 cc of NH_4OH (sp. gr. 0.90). When solution is complete, filter and pour the solution slowly and with constant stirring into a mixture of 400 cc of HNO_3 (sp. gr. 1.42) and 600 cc of water. Let settle for 24 hours and use the clear supernatant liquid.

(d) *Potassium Nitrate Solution (1 Per Cent).*—Dissolve 10 g of KNO_3 in recently boiled water, dilute to 1000 cc with recently boiled water and mix.

(e) *Standard Sodium Hydroxide Solution (Approximately 0.3N).*—Prepare a saturated solution of NaOH in a stoppered flask, let settle overnight, and pipette a clear 20-cc portion into a one liter volumetric flask. Dilute to 1000 cc with recently boiled water and mix, cool to room temperature, and standardize against the Bureau of Standards standard benzoic acid, using phenolphthalein indicator. Dilute, if desirable, restandardize; and protect the solution from CO_2.

(f) *Standard Nitric Acid Solution (Approximately 0.3N).*—Mix 20 cc of HNO_3 (sp. gr. 1.42) and 1000 cc of recently boiled water, cool to room temperature, and standardize against the standard NaOH solution (e), using phenolphthalein indicator. Adjust the solution until it is exactly equivalent.

(g) *Phenolphthalein Indicator.*—Dissolve 1 g of pure phenolphthalein in 100 cc of 85-95 per cent ethyl alcohol.

(h) *Methyl Orange Indicator.*—Dissolve 1 g of methyl orange in 1 liter of distilled water.

Basis of Purchase

Phosphate cleaner shall be purchased by net weight. Packing shall be in accordance with commercial practice, unless otherwise specified.

A new soap and glycerin factory will be erected at Eton, England, the District Council having placed its approval on the preliminary plans.

Soap Exports Lower in November

November, 1926, soap exports were valued at almost $50,000 less than those in the same month a year ago, reaching approximately $650,000. Laundry soap exports totaled 5,263,495 pounds, valued at $360,821; Toilet soaps, shipped out in November, were valued at $195,440, the tonnage amounting to 528,319 pounds. Exports of all other soaps totaled 1,238,032 pounds, sold for $92,867. The Philippines bought the largest quantity of laundry soap, almost a million and a half pounds, while Canada took 1,127,000 pounds. Canada was the largest buyer of toilet soaps, shipments to that country aggregating 88,655 pounds in November. Cuba bought almost 75,000 pounds of toilet soaps, with British India, the Philippines and various South American countries also important importers. The United Kingdom bought 305,000 pounds of miscellaneous soaps. Canada took 228,000 pounds and the Philippines 220,000 pounds. Porto Rico was an important buyer of American laundry and miscellaneous soaps, taking almost two million pounds in November, along with 79,692 pounds of toilet soaps, these figures not being included in the above totals.

Dry Cleaners Hold Annual Meeting

The twentieth annual meeting of the National Association of Cleaners and Dyers was held Jan. 17 to 20 at the West Baden Springs Hotel, West Baden, Ind. The business meetings were occupied with talks and discussions on advertising and sales methods together with addresses on modern cleaning methods. Plenty of entertainment was provided to keep delegates, their wives and other of the convention attenders, occupied. Armour Soap Works, Beltine Chemical & Mfg. Co., Davies-Young Soap Co., Darco Sales Corp., Eaton-Clark Co., Foree Products Co., Midland Chemical Laboratories, Palmolive Co., and R. R. Street & Co., had exhibits at the convention.

Each kilo of imported soap, sold in Mexico by first hands, is now taxed five centavos. This tax is in the form of a stamp, called a health stamp. On soaps manufactured locally, a stamp costing two centavos is required. This decree became effective Jan. 19.

The value of sodium silicate, produced in 1925, was $5,715,026, total production having reached 394,824 tons. This represents a sharp increase from 1923 figures, when only 331,309 tons were manufactured.

Glycerin Imports Cut 50 Per Cent

Imports of glycerin, for the month of November, 1926, were almost fifty percent lower than in October, the record month. Crude imports totaled 1,012,126 pounds, valued at $134,041, as against 2,575,289 pounds in October. Refined goods, imported in November, were valued at $255,875 and totaled 1,022,285 pounds. Most of the crude came from France, with the Netherlands and Germany large suppliers of refined goods.

Naval Stores Trade Meets in Florida

The fourth annual Get-Together Meeting of the naval stores trade will be held in Jacksonville, Fla., on Feb. 21, 22, and 23 at the Carling Hotel. Formal opening will be held Monday evening, the 21st, with business sessions Tuesday morning and afternoon, and Wednesday morning. An oyster roast will be held Wednesday afternoon and the banquet Wednesday evening. There will be a golf tournament. All branches of the industry will attend the meeting, producers, factors and dealers, and brokers. Last year the meeting was held in New Orleans and the year before in Savannah.

Liquid caustic potash, carloads, minimum weight in tank cars, 80,000 pounds, and in iron drums, 36,000 pounds, will take a freight rate of 6 cents per hundredweight, on the Lehigh Valley, between Niagara Falls and Suspension Bridge and Buffalo and East Buffalo. This reduced rate went into effect Jan. 22.

New freight rates on caustic soda, caustic potash and silicate of soda, from stations between North Tonawanda and Suspension Bridge, N. Y., to various stations on the D. L. & W., in New York, have been in effect since Jan. 27. All of the changes were reductions from rates previously charged.

Kiefer-Stewart Co., Indianapolis wholesale drug house, has acquired a majority of the stock in the Walding, Kinnan & Marvin Co., Toledo wholesale druggists. The management of the two companies will be combined, in order that they may not conflict with each other, but each will retain its own name and headquarters.

Vegetable oils, excepting peanut, cottonseed, linseed, olive, castor, sesame, solsaseed and turnipseed oils, are subject to a higher Italian import duty, according to a recent decree. The new duty is 33.6 gold lire per 100 kilos, as compared with 24 gold lire assessed previously.

Castile from Any Fat, says Kyser

Castile soap may be made from any fatty ingredient and still be correctly and legally termed castile soap, according to the opinion of Dr. E. V. Kyser of the School of Pharmacy of the University of North Carolina, an authority who has investigated the history and nomenclature of the product. Dr. Kyser was formerly a chemist with the Cincinnati Soap Company. He testified before the examiner of the Federal Trade Commission last month in New York in the misbranding case against James S. Kirk & Co., Chicago soapmakers. He submitted a formal report of his research into the history of castile soap giving a vast number of references. He said that the term castile soap, did not appear in any Spanish, French or Italian pharmacopeias and that while a Castilian dictionary listed 26 varieties of soap, castile was not among them. Dr. Kyser said the term, castile soap, originated in England and that Ben Johnson first used the term in the early part of the seventeenth century in the play "Man and Ass." It was here called "castile soap" and the first reference to "castile" was a century later.

Mr. Reardon's cross-examination of Dr. Kyser, which occupied almost two days, dealt largely with the witness' failure to include in his testimony certain philological references. In the course of the cross-examination, Dr. Kyser reiterated his opinion that castile soap for toilet purposes may be made with the use of any fatty ingredient.

Dr. A. G. Dumez, of the Hygienic Laboratory, Washington, who was chairman of the nomenclature subcommittee in connection with the tenth decennial revision of the pharmacopeia, testifying for the respondent told of the steps which led up to a changing of the reference to castile soap in the latest revision of the pharmacopeia. The ninth revision read "Sapo—soap—white castile soap," whereas the tenth revision was changed to "olive oil castile soap" instead of "white castile soap." The witness testified that this change was caused by the desire for clarity in that it was recognized that there were soaps other than those made only of olive oil that were designated as castile. The tenth revision of the pharmacopeia was placed in evidence by D. F. McPherson, counsel for Kirk, over the objection of Edward E. Reardon, counsel for the commission. Following the hearings in New York, Examiner Averill of the Commission moved to Boston and a continuation of taking testimony in the case was held there.

BROMSTYROL

WE WISH to acquaint those Soap-Makers, who have experienced difficulty in securing sufficient quantities of a uniformly high grade Bromstyrol to meet their requirements, with our excellent facilities for serving them. By virtue of our arrangements with E. Sachsse & Co., we are able to maintain a large stock of this perfuming agent at all times.

We solicit your trial order of this Aromatic Chemical. Chemically pure and light in color. The price is right. Guaranteed not to discolor the soap. May we hear from you?

Manufactured by E. SACHSSE & CO., Leipzig

Sole Selling Agent

Pfaltz & Bauer, Inc.

300 PEARL STREET · NEW YORK

Change Soap Freight Rates

The Interstate Commerce Commission has suspended until May 17 the operation of certain railroad schedules which propose to cancel proportional commodity rates on soap, soap powder and related articles, in carloads, from Kansas City, Mo., Omaha, Nebr., Sioux City, Ia., and related points to Brockport and Cairo, Ill., and other Ohio River crossings and Memphis, Tenn., on traffic destined to Southeastern and Carolina territories, and to apply fifth class rates in lieu thereof.

Argue Carlton Soap Case

Final argument was held by the Federal Trade Commission in its case in docket No. 1360 against the Carlton Soap Company, Inc. The Commission was represented by its attorney, Charles M. Neff, while the respondent soap company did not appear either in person or by counsel.

Attorney Neff told the Commission that the complaint in this case was issued in January of last year and that the firm was charged with unfair methods of competition in that the respondent, engaged in the sale of toilet and bath soaps, labeled certain of its soaps "British Bath" soap, when in fact the soap was manufactured in the United States, thereby tending to mislead and deceive the purchasing public and to injure competitors who did not practice misrepresentation in alleged violation of section five of the Federal Trade Act. Mr. Neff showed the Commission some exhibits of the soap products. The Commission has taken the case under advisement.

Phila. Quartz Celebrates 95th Year

The 95th anniversary of the founding of the Philadelphia Quartz Co., Philadelphia, was celebrated in the form of a dinner on Jan. 26 at the Down Town Club, Philadelphia, attended by the personal of the home and branch offices and plants. There were no formal addresses, only a short informal talk by William T. Elkinton, president. Prizes for the trade-mark contest recently held by the company, were awarded. Mrs. John D. Carter won first prize of $100 and Miss Frances Suarez second prize of $50. James G. Vail, secretary, awarded the prizes. Moving pictures were shown during the evening.

William Cooper Procter, accompanied by Mrs. Procter, sailed from New York on the "Rotterdam," Feb. 3. Mr. and Mrs. Procter were starting on the first leg of a trip 'round the world.

Edlund to Manage Soap Association

Roscoe C. Edlund of Springfield, Mass., has been appointed manager of the recently formed Association of American Soap & Glycerine Producers whose incorporation was announced in the January issue of *Soap*. Mr. Edlund comes to the Association with executive and organization experience not only in business and industrial lines, but especially in community service and education. A native of Brooklyn and a Cornell University graduate, he was for some years assistant to the president of Cornell University and later assistant to the general director of Russell Sage Foundation. In Cleveland and Baltimore, he was an executive of community chest and welfare federations. In New England, he has taken a leading part in bringing industrial and agricultural interests together to increase farm production, advertise local farm products in New England markets, and cooperate with federal and state governments in agricultural extension service. In this work, he was for six years head of the largest county organization in the United States. He has had sales experience in New York and in the South and has recently been engaged on advertising and merchandising plans for New England industries.

ROSCOE C. EDLUND

Details of the Association's program await further study and organization. It is probable that a large part of the Association's work will be along lines of general education and public service. Research, publication, and promotion may be undertaken, aimed to bring about higher standards of cleanliness among all classes of people in all parts of the United States, and cooperation may be sought with educational, health and other organizations that are interested in cleanliness. In this kind of program, Mr. Edlund's experience in community service will be of especial value.

The Uniform Cosmetics Bill which was described in full in the January issue of SOAP, and sponsored by the Association of Dairy Food & Drug Officials of the United States, was introduced into the Massachusetts Legislature last month as H. B. 78.

"Distinguished for its High Test and Uniform Quality"

Soda Ash
Caustic Soda
Bicarbonate of Soda

Michigan Alkali Company

General Sales Department

21 East 40th St. - - New York City

Chicago Office: 332 South Michigan Ave.

Works: Wyandotte, Mich.

Expect Stronger Glycerin Market

That there will be a reversal in the softness of the present glycerin position within the next two months is the opinion of Parsons & Petit, New York, in their market report of February 4, which says: "Business has been light during the week just ended, but there have been more inquiries, although the quantity indicated, has in no case been large. There are sellers of dynamite for February and March at 25c per lb. While brokers have been asking for bids of 24¾c, we have heard of nothing being sold at that figure. We are passing through a period, quite similar to that of a year ago. After a strong and advancing market, commencing in November, 1925, the peak of price, was reached the latter part of December; then followed a dullness, with a continuous decline, until the latter part of March, 1926, when an improvement started, which continued up to the end of the year; from then on, the demand has been practically nil and prices have suffered accordingly. From various points in Europe, we are advised that the candle and soap trades, have been hurt by poor business and as a result, the production of glycerine has been below normal; however the demand for refined glycerine, has not been heavy, there, of late and as a consequence, the prices of both crude and refined are down. A month or so ago, there was heavy buying on the part of United States and this served to sustain the market, for a while, but when this demand disappeared, the support was removed and a gradual drop in values, has resulted. We still hold the opinion, that within the next two months, we shall see a reversal in conditions and we believe that during that time, buyers should take advantage of the opportunity of covering their requirements, for several months in advance, if possible, purchasing prompt goods and carrying them, if they find it impossible to contract for futures. Within a short time, producers of refined glycerine, will begin to lay by, a fair part of their output, for the anti-freeze demand, for next season, and notwithstanding, that we may carry some stocks over this year, we must be prepared for an increase in the demand, for radiator use, from year to year. In addition, various industrial lines, are consuming more, new uses are appearing, right along and the call for chemically pure is increasing wonderfully. It is quite evident, that from now on, we must import large quantities of glycerine from abroad, for last year we bought in, over 37,000,000 lbs., fully up to the average pre-war quota. Although the industrial outlook for this year, indicates a contraction, as compared with 1926, we may be pleasantly disappointed when the year is over, but even if 1927 does not quite reach 1926 figures, there is no cause for alarm."

To Operate Marx & Rawolle Plant

The glycerin refining plant, formerly owned by Marx & Rawolle, New York, and recently bought by the Consolidated Products Co., New York, used machinery dealers, is reported being placed in condition to resume operations in the near future. A new company is understood to be in the process of formation to carry on the plant. It is reported that Dr. A. C. Langmuir, glycerin expert, may direct the new operations of the plant.

Colgate Regains Bowling Lead

During January, the bowling team of Colgate & Co., Jersey City, regained the lead in the Wholesale Drug Trade Bowling Association of New York. At the beginning of the year, they were tied with Lanman & Kemp, New York, who dropped back to second place. The Roessler & Hasslacher team moved up to third place in the league. In the matches on Jan. 31, Kruzewski of Colgate rolled a "clean game" of 224. The standing of the teams on Feb. 1 was as follows:

	Won	Lost
Colgate & Co.	19	8
Lanman & Kemp	16	8
R. & H. Chemical Co.	15	12
Church & Dwight Co.	13	11
E. R. Squibb & Son, No. 1	11	13
E. R. Squibb & Son, No. 2	10	14
Grasselli Chem. Co.	11	16
A. Klipstein & Co.	7	20

Orford Soap Wins Freight Case

Washington, D. C.—The Interstate Commerce Commission has rendered a decision in the case of the Orford Soap Company against the New York, New Haven & Hartford Railroad. In their syllabus in this case, the Commissioners say: "On complaint that 14 carload shipments of soap and cleaning compounds moving from Manchester, Conn., to Cincinnati, Ohio and St. Louis, Mo., during the period January 9, to March 12, 1924, were misrouted, found, that the shipments tendered on and after February 5, 1924 were not misrouted and that the shipments moving prior to that date were misrouted. Reparation awarded."

HEIKO

SAPOFIXIN

We invite you to try our Sapofixins
in your Soaps as reinforcers.

Sapofixin Eau de Cologne
Sapofixin Hyacinth
Sapofixin Lavender
Sapofixin Lilac
Sapofixin Lily of the Valley
Sapofixin Orange
Sapofixin Pine
Sapofixin Rose
Sapofixin Violet

HEINE & CO.
NEW YORK
TELEPHONE BEEKMAN 1535
52-54 CLIFF STREET

Sole Distributors for HEINE & CO., A. G., Leipzig
in the United States and Canada

PERSONAL and IMPERSONAL

William Cooper Procter has been elected to the board of directors of the New York Central Lines, succeeding Frank J. Jerome. All of the other members of the board, including Chauncey Depew, chairman, were re-elected.

The Remmers-Graham Co., Cincinnati, and the Beaver Soap Co., Dayton, O., soap manufacturers, have consolidated their selling forces under one head for the sale of products of both companies. Products of the two firms, however, are still shipped and charged by the individual companies. Negotiations leading up to a merger of the two companies are now in progress, but this is not as yet accomplished and no definite statement regarding this has been issued by either company as yet.

Fairchild & Shelton Co., Bridgeport, Conn., soapmakers, have discontinued the manufacture of soaps and the business has been placed in the hands of Frank S. Slosson, receiver, who is disposing of the company's property. The present operators of the business have no intention of continuing activities in any way, according to advices from the receiver.

Cowles Detergent Co., Cleveland, have appointed W. E. Wyatt to the technical division of the company's Chicago branch. Mr. Wyatt has had considerable practical experience with laundries in and about Chicago.

Soaps, disinfectants and allied products are being made by the Goss Products Co., Durham, N. C., recently incorporated for $50,000 by John H. Goss, Jr., of Durham, and others.

Frank F. Skillman, consultant for Procter & Gamble since his retirement from the position of general factory superintendent, in 1922, died at his home in Cincinnati, Jan. 19, at the age of fifty-eight years.

Soaps will be manufactured by the recently incorporated Shyn-Eze Products Co., Dallas, Tex. The firm is capitalized at $150,000.

W. C. Hardesty, formerly general manager of J. Eavenson & Sons, is head of the W. C. Hardesty Co., now manufacturing stearic acid and allied products at Pittsburgh. The old Falk & Co. factory is being occupied by the new concern. The company's New York office is at 41 East 42 st.

Percy C. Magnus, Magnus, Mabee & Reynard, New York, has been appointed chairman of the membership committee of the New York Board of Trade and Transportation. Frederick E. Watermeyer, of Fritzsche Brothers, Inc., is chairman of the organization's committee on essential oils and C. L. Speiden, Innis Speiden & Co., heads the chemical committee.

National Lavolina Co., Brooklyn, has been incorporated for $15,000 to carry on a shampoo manufacturing business. A. Bucalos, 496 Hart St., Brooklyn, was attorney for the incorporators.

Mrs. C. W. Aiken, wife of Charles W. Aiken, of the Houchin-Aiken Co., died Dec.30 at Webster Lake, Franklin, N. H. Mrs. Aiken had been seriously ill for several months, having been taken to Webster Lake over a year ago in an effort to improve her health. Since that time Mr. Aiken has been spending practically all of his time in New Hampshire.

Peerless Soap Co., Camden, N. J., has been incorporated for $75,000. Russell E. Rose was attorney for the incorporators, Charles Schuyler, Herbert Siner and Herbert J. Koehler.

The Melba Manufacturing Co., Chicago cosmetic manufacturers, was purchased last month by D. A. Schulte, president of the chain of cigar stores, for a reported price of $2,500,000. Schulte also owns V. Vivaudou, Inc., New York. Melba products will be manufactured and marketed by Vivaudou, Inc.

Herbert L. Shaftoe, who joined the sales staff of Givaudan-Delawanna, Inc., New York, the first of the year, is acting as local representative in Cincinnati.

for toilet soaps —

BERGAMOT ARTIFICIAL

The quality we offer resembles the natural to a marked degree. It will not decompose in contact with alkali or from heat. This, together with its reasonable price, makes its unstinted use in soap-perfuming eminently satisfactory. With the natural oil high in cost, it will pay you to investigate the possibilities of this product.

LAVENDER OILS

(Bertrand Freres)

Years of experience stand behind the Lavender Oils, both French Flowers and Spanish types, which we offer for the account of our principals, Bertrand Freres, one of the oldest of the essential oil distillers. In the purchase of Oil of Lavender, it is especially advisable to consider the source and here quality is absolutely guaranteed.

P. R. DREYER

Importer and Specialist in
Essential Oils and Aromatics

26 CLIFF STREET - - NEW YORK

Sole Agent

BERTRAND FRERES, Grasse, France

Say you saw it in SOAP!

Soaps, cleaning compounds and polishes will be made by the Pera-Pine Co., 955 Grant Ave., Chicago, recently incorporated with a capital of $25,000. Clarence C. Dyson, Rockford, Ill., was attorney for the incorporators, J. B. Long, A. H. Waterman and J. H. West.

Procter & Gamble Mfg. Co. will soon issue a book, "The Washroom," which will deal with washroom problems and practices. The book is the result of many years research in the Procter & Gamble laboratories and should be of considerable value to all laundryowners.

Du Pont Cellophane Co. reduced prices for all varieties of cellophane as of January 15, 1927. New price lists covering stock and special cut sheets, rolls, and envelopes have been issued.

Oil Trades Association of New York held its annual dinner, Feb. 9, at the Waldorf Astoria, New York. A reception preceded the dinner.

C. W. Barth, St. Louis, Mo., heads a new company, Barth & Co., Inc., recently incorporated to manufacture soap. The firm has a capital of $10,000.

Stokes & Smith Co., Philadelphia, have issued an attractive new catalogue describing tight-wrapped packages and their machinery for tight-wrapping. One page, done in color, shows a number of nationally advertised products packaged by Stokes & Smith machines.

Henry Pfaltz, for many years president of Pfaltz & Bauer, Inc., New York importers of perfuming materials and chemicals, has sold his interest in the company to Frank M. Bauer and has retired from the business. Mr. Bauer is now president and treasurer of the company. Kurt Walwer is vice-president, B. O. Hoffman is assistant treasurer and N. L. Fremed is secretary. The latter three men have been in the employ Pfaltz & Bauer, Inc., for several years.

B-J Products Co. has been incorporated at Louisville, Ky., to make soaps. Stanley S. Bond, Edgar Grossman and Harry L. McClelland were the incorporators of the company, which is capitalized at $10,000.

Pierre Lemoine, Inc., New York essential oil importers, are now back in their old quarters, at 108 John St., from which they were recently forced to move on account of fire. The building has been completely renovated.

National Association of Stearic Acid Manufacturers met at the Hotel William Penn, Pittsburgh, on Feb. 1, to complete arrangements for the opening of a research department at the Mellon Institute.

The National Association of Stearic Acid Manufacturers has appropriated $50,000 for research to be used towards finding means to reduce the cost of articles in which manufacturing process, stearic acid is used.

Pneumatic Scale Corporation, Norfolk Downs, Mass., has moved its New York office from 52 Vanderbilt Ave. to 26 Cortlandt St. George F. Brown will remain in charge of sales of liquid filling equipment. Mr. Brown was connected with the Standard Automatic Machine Co. of Rochester, N. Y., when this company was taken over by the Pneumatic Scale Corp. Charles F. Doble will be in charge of sales of dry materials packaging machinery at the New York Office.

Ungerer & Co., New York, have issued notice that their trade mark, "Floressence," is being infringed, and state that they have the exclusive rights to the word in connection with the labelling and sale of floral products.

American Manufacturers of Toilet Articles will hold their thirty-third annual convention at Atlantic City, May 9-11. Headquarters will be at the Hotel Ambassador. The tentative program calls for business meetings in the mornings, reserving the afternoons for golf and other amusements.

E. M. Laning, head of E. M. Laning Co., New York importers of perfuming materials, has announced the appointment of two new sales representatives, Walter Weinstock, of the Weinstock Chemical Co., who will handle Pacific Coast sales and Robert W. Cook, North St. Paul, Minn., who will represent the company in Iowa, Wisconsin, Illinois (outside of Chicago), and Minnesota. Arrangements are being made looking toward the appointment of representatives in other sections of the country.

James M. Keating, formerly with General Chemical Co., in the sales division, is now associated with Congoleum-Nairn Co., Philadelphia. J. E. Egleson resigned his position with General, along with Mr. Keating, the end of last month, and is also with the Philadelphia firm.

Société Anonyme des Etablissements

ROURE-BERTRAND FILS

LARAGNE (France) GRASSE BOUFARIK (Algeria)

GERANIUM AFRICAN

GERANIUM BOURBON

LAVENDER FLEURS

VETIVERT BOURBON

YLANG YLANG BOURBON

YLANG YLANG NOSSI BE

PETIT GRAIN South American

Will be pleased to submit samples with prices on request

Sole Agents for U. S. and Canada

GEORGE SILVER IMPORT CO.

461-463 Fourth Avenue New York

Say you saw it in SOAP!

ON PRODUCTS AND PROCESSES

An anti-freeze compound has been patented as U. S. No. 1,605,377, composed of a mixture of castor oil or other oil dissolved in ethyl alcohol and mixed with a solution of calcium chloride.

A detergent comprised of turpentine, paraffin oil, olive oil, borax and ammonia has been patented in England for use to remove stains, grease, etc. from fabrics.

A humidity figure for various soaps where no moisture is lost or gained has been worked out by Lederer, *Zeit. Deut. Oel und Fett Industrie*, 46, 519, 1926, with limited cases. Experimental data is based upon work with sodium stearate, but was found in fair agreement with commercial soaps. For milled soaps with 80% fatty acids and 130 gr. of water per kilo of soap, the humidity at which no moisture was gained or lost was 87%. For grained soaps of 66% fatty acids and 280 gr. water per kg., it was 96.4%; for 60% fatty acids and 345 gr. water per kg., it was 97.6%.

Splitting materials for fats and waxes are made from organic sulfo compounds in mixture with porous materials such as kieselguhr or animal charcoal to produce a pulverulent product by absorption. U. S. Patent No. 1,608,341.

Decomposition and discoloration of soap is prevented by mixing molten soap with 0.05 to 1.0% of aniline, alphanaphthylamine, paraphenylenediamine, diphenylamine or other organic amine having a residual hydrogen atom, according to a British patent owned by R. E. Devine.

Soap bleached with potassium persulfate began to darken within 24 hours and within four weeks was as dark as before bleaching, according to tests by Braun and Nast reported in the *Seifensieder Zeitung*, 53, 431 and 450, 1926. Soap made from brown waste cooking fat (100 kg.) was boiled with 500 gr. of persulfate for 45 minutes. Where the soap was boiled for four hours, a light yellow color remained permanent. Soap containing 10% rosin bleached with 500 gr. persulfate and 50 gr. zinc oxide was light yellow and did not darken. Soap bleached with 250 gr. persulfate and 100 gr. sodium peroxide gave a good color. Where 100 gr. of persulfate and 50 gr. of manganese oxide were used, the effect was equal to the use of 500 gr. of persulfate alone. Conclusions reached: soaps containing rosin are best bleached with a reducing agent or an oxidizing agent plus zinc oxide; oxidizing bleaches work best on brown tallow, but do not give good results on yellow tallow.

Olive oils obtained by solvents can be identified even in small amounts mixed with pressed oil by a reaction of Pachini in the *Giornale Chim. Ind. Applicata*, 8, 178, 1926. Treat 2 to 3 cc. of oil in test tube with equal volume of acetone, heat and shake, cool and filter through a small filter moistened with acetone. To the filtrate in small porcelain dish, add few drops of concentrated sulfuric acid. A cherry red color soon develops. If a few cc. of water are added to this, the liquid takes on a more or less intense green color, which soon disappears. All olive oil obtained from olive husks by solvents gives this reaction. It is even more pronounced in refined extracted oils due to the absence of chlorophyll and other disturbing impurities.

A dentifrice composed of silicon sucrate, manganese or aluminum hydroxide, or other amorphous, gelatinous sucrate, together with glycerin and flavoring materials, has been patented as U. S. No. 1,607,696.

A cleaning powder for use on porcelain is made from sodium bisulfate mixed with magnesium oxide or other metallic oxide, sufficient to react with only a portion of the bisulfate.—U. S. Patent No. 1,599,996.

A hand cleanser is covered by U. S. Patent No. 1,598,664, as follows:—red oil 13 parts; Kerosine 100; water 50; ammonia water, 26 deg., 3½ parts.

Trageser Steel Drums—

are built to last!

THEY make ideal containers for liquid soaps, disinfectants, cleaning preparations, essential oils, vegetable oils and other liquid products.

30 - 55 - 110 GALLON SIZES

BLACK - GALVANIZED - TINNED

We also make Removable Head Drums and Steel Nesting Cans For Semi-Liquid or Paste Products

JOHN TRAGESER STEAM COPPER WORKS

451 WEST 26th STREET NEW YORK CITY

Chicago Representative
Harry E. Rice - 724-728 Washington Blvd.

Cleveland Representative
Fred H. Palmer, Jr. - 914 Guarantee Title Bldg.

Say You Saw It in SOAP!

THE average business house receives a great many inquiries for its products or services every year which cannot be attributed to any special source. A vast majority of these probably originate from some form of advertising but, due to the general tendency toward not mentioning the names of publications, cannot be directly traced.

A short time ago a manufacturer, using space in this magazine, received a number of inquiries during the week following publication. All were for a product which was advertised exclusively in SOAP. Not one of the letter-writers, however, mentioned SOAP, although all of them wrote because they saw the advertising in the magazine.

When you write to a manufacturer of raw materials or equipment, in response to advertising in this publication, say you saw it in SOAP. The advertiser will appreciate it—and so will we!

The Publishers

CONTRACTS AWARDED

The following awards for soaps have been made by the quartermaster, Chicago: Franklin MacVeagh & Co., Chicago, toilet soap for Chanute at 7.29c a pound, for Rock Island at 7.29c a pound, for Harrison at 7.07c a pound, ton, floating soap at 3.3c a pound, washing pow- at 6.9c a pound; Windsor Soap Co., Washington, floating soap at 3.3c a pound, washing powder for Chanute at 4.2c a pound and for Sheridan at 20c; Campbell Holton & Co., Bloomington, Ill., chip soap for Selfridge at 6¾c a pound; Purdy & Stevens Co., Brooklyn, grit soap for Hayes at 3¼c a pound; J. Eavenson & Sons Co., Camden, N.J., laundry soap for Harrison at 5.19c, for Snelling at 5.58c, for Hayes at 5.09c, for Erie at 5.19c, for Fairfield at 5.14c, for Chanute at 5.31c., for Savanna at 5.35c, and for Sheridan at 5.25c a pound.

The following contracts have been awarded by the quartermaster, Chicago: Franklin MacVeagh & Co., Chicago, toilet soap for Chanute at 7.26c, for Rock Island at 7.24c, for Sheridan at 6.94c, and Wayne at 6.99c a pound; Be Vier & Co., Inc., toilet soap for Selfridge at 8c, soap chips for Selfridge at 20c, shaving soap for Sheridan at 21.5c, for Chanute at 23.5c, for Selfridge at 24c, and tooth paste for Chanute Field at 13.5c, and for Wayne at 14c a pound; Procter & Gamble Distributing Co., Chicago, laundry soap at 5.59c a pound; Unity Sanitary Supply Co., New York, grit soap for Savanna at 6.5c a pound; Swift & Co., Chicago, scouring soap for Wayne at 3.6c a pound; Windsor Soap Co., Inc., Washington, washing powder for Chanute at 4.5c, for Selfridge at 4.8c, for Sheridan at 22c, and for Savanna and Rock Island at 4.5c a pound; and Armour & Co., Chicago, washing powder for Custer at 12.08c, and for Wayne at 3c and 12.08c a pound.

The bid of the Globe Soap Co., Cincinnati, has been accepted by the quartermaster, Marine Corps, Washington, for 12,000 pounds soap powder at 3.22c lb.

Proctor & Gamble Distributing Co., Cincinnati, has been awarded a contract to supply Fort McPherson, Ga., with ivory soap at 6.65c, and Kelly Bros. Co., has been awarded a contract for washing powder at 25c.

Texas Soap Co., San Antonio, has been awarded a contract for 98,500 lbs. laundry soap at 4.45c lb. for Fort Sam Houston (Circular 141).

J. Eavenson & Sons, Inc., has been awarded a Government contract for 7,500 cakes white soap at $8.60.

The following contracts for soap and similar articles have been awarded by the quartermaster, Fort Sam Houston: Peet Bros. Co., Kansas City, Mo., Palmolive soap at 6c, soap at 6, and toilet soap at 6c; Windsor Soap Co., soap at 3.9c; Swift & Co., San Antonio, Texas, washing powder at 3.1c; E. W. Kirkland, San Antonio, washing powder at 3.75c; Ullman, Stern & Krausse, toilet soap at 4c; James A. Dick Co., El Paso, Texas, toilet soap at 6.77c; Colgate & Co., toilet soap at 8c; Albert Steinfield & Co., toilet soap at 7c.

J. B. Ford Co., Wyandotte, Mich., has been awarded a Government contract for 4 barrels scouring compound at $14.80 bbl.

M. O'Connor has been awarded a contract to supply Fort Benjamin Harrison with Palmolive soap at 6.75c, and shaving soap at 15c.

Austin Nichols & Co., Inc., New York has been awarded a contract to supply Camp McClellan with shaving soap at 23c and Schloss & Kahn Grocery Co., Montgomery, Ala. has been awarded a contract for toilet soap at 7c.

Palmolive Co., Chicago, has been awarded a Government contract for shaving soap (cream) at 21.25c lb.

The following contracts for soaps have been awarded by the quartermaster, Chicago: Palmolive soap for Chanute, Selfridge and Rock Island at 6.25c to Campbell Holton Co., Bloomington, Ill.; white floating soap for Rock Island at $3.60 to Windsor Soap Co., Washington; and laundry soap for Sheridan, Chanute and Savanna at 5c to Armour & Co., Chicago.

RECORD OF TRADE-MARKS

The following trademarks were published in the January issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of Feb. 20, 1905, as amanded March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, a fee of ten dollars must accompany each notice of opposition.

Trade-Marks Filed

Tryit—This in black letters over an emblem describing a gritty hand soap. Filed by Tryit Products Co., Bellevue, Ohio, March 19, 1926. Claims use since January 1, 1923.

Medi-Foam—This in outline letters describing soap and shaving creams used preparatory to shaving. Filed by the Medi-foam Co., Cleveland, Ohio, April 26, 1926. Claims use since April 17, 1926.

Wow—This in black letters on a box describing insecticides. Filed by the Bing Mfg. Co., Inc., New Orleans, La., May 5, 1926. Claims use since April 24, 1926.

Sopono—This in black letters describing soap compound. Filed by the Melbar Manufacturing Co., Inc., San Francisco, Calif., July 27, 1926. Claims use since May 1, 1926.

Shavemate—This in black letters describing preparation for shaving, a beard softener and pore cleaner. Filed by Edward Wayman Crane, Springfield, Mass., Sept. 14, 1926. Claims use since August 26, 1926.

Lysol—This in black letters describing soap, shaving cream and preparations having cleaning qualities recommended for use in the household, etc. Filed by Lysol, Inc., Bloomfield, N. J., Sept. 23, 1926. Claims use since about August, 1917, on shaving cream, on soap since about March, 1917. On other preparations since about 1890.

Shur-Drane—This in black letters describing chemical cleaner for lavatory, sink, or other drains. Filed by Scale Solvent & Products Co., Kansas City, Mo., Oct. 11, 1926. Claims use since July 1, 1925.

Osborn's Dry Shampoo—This in black letters over an emblem, all in a box, describing shampoo. Filed by Margaret U. Osborn, Houston, Tex., Oct. 25, 1926. Claims use since July 1, 1926.

Great American—This in outline letters under the head of an Indian describing toilet soap. Filed by Oscamp Nolting Co., Cincinnati, Ohio, Oct. 25, 1926. Claims use since Sept. 21, 1926.

Pre-Test—This in black letters describing chemical and medicinal preparations, namely disinfectants, deodorant and cleanser; Germicide dip. Filed by Pre-Test Products Co., Sedalia, Mo., Nov. 3, 1926. Claims use since April 1, 1926.

Clarus—This in black letters describing oil soap. Filed by Phoenix Oil Co., Cleveland, Ohio, Nov. 6, 1926. Claims use since about March 9, 1921.

Cafti-Fume—This in back letters describing fumigant briquettes. Filed by Safety Fumigant Co., Boston, Mass., Nov. 8, 1926. Claims use since Jan. 1, 1926.

Tis—This in black letters describing soap and grease solvent. Filed by Tis Co., St. Louis, Mo., Nov. 11, 1926. Claims use since May 3, 1920.

Soponite—This in black letters describing soap, hand cleaner and general household cleaner. Filed by Menlove Mfg. Co., San Francisco, Calif., Nov. 15, 1926. Claims use since Sept. 21, 1926.

Ako Spotter—This on a black background describing dry-cleaning preparations. Filed by Auglaize Chem. Co., Wapakoneta, Ohio, Nov. 19, 1926. Claims use since May 14, 1926.

Super Suds!—This in black letters underlined describing soap chips. Filed by Colgate & Co., Jersey City, N. J., November 24, 1926. Claims use since November 20, 1926.

Sanol—This in black letters in two squares connected with "N" describing disinfectants, insecticides, germicides and deodorizes. Filed by Sanoli Labs., Ampere, N. J., Nov. 14, 1925. Claims use since 1915.

Biondo—This in black letters describing hair shampoo. Filed by Frances Glatzer,

New York, N. Y., July 21, 1926. Claims use since June 1, 1926.

Hennaglo—This in black letters describing hair shampoo. Filed by Frances Glatzer, New York, N. Y., Juy 21, 1926. Claims use since June 1, 1926.

P D Q—This in black letters describing floor cleaner. Filed by J. M. Cinnamond, San Francisco, Calif., Sept. 27, 1926. Claims use since August 9, 1926.

Haas-Quality Soap—This in black letters in a box describing soaps. Filed by Joseph Gutradt Co., San Francisco, Calif., Oct. 6, 1926. Claims use since July 1, 1926.

Hy-Gloss—This in black letters between two lines and above the picture of diamond, describing liquid soap. Filed by Eugene von Seyfried, Irvington, N. J., Oct. 16, 1926. Claims use since Oct. 1, 1926.

Roaches Last Meal—This in black letters in an oval under the picture of a dead roach, describing preparation for exterminating water bugs, roaches, ants etc. Filed by Albert G. Mass, Indianapolis, Ind., Nov. 1, 1926. Claims use since 1921.

Musolite—This in black letters describing wet cleaning solution for clothes. Filed by R. R. Street & Co., Inc., Chicago, Ill., Nov. 17, 1926. Claims use since October 1, 1926.

Dyo—This in black letters describing disinfectants and germicides. Filed by American Disinfecting Co., Sedalia, Mo., Nov. 22, 1926. Claims use since 1923.

No-Trax—This in outline letters describing preparations for polishing wood floors, linoleums, etc. Filed by American Disinfecting Co., Sedalia, Mo., November 22, 1926. Claims use since 1923.

Obugo—This in black letters describing insecticides and disinfectants. Filed by American Disinfecting Co., Sedalia, Mo., Nov. 22, 1926. Claims use since 1923.

Oflyo—This in black letters describing insecticides. Filed by American Disinfecting Co., Sedalia, Mo., Nov. 22, 1926. Claims use since 1923.

Solpo—This in black letters describing disinfectants and germicides. Filed by American Disinfecting Co., Sedalia, Mo., Nov. 22, 1926. Claims use since 1923.

Companion—This in black letters describing deodorizing powder. Filed by Companion Products Co., Kansas City, Mo., Dec. 11, 1926. Claims use since Jan. 15, 1926.

Lacterine—This in black letters describing disinfectant. Filed by Companion Products Co., Kansas City, Mo., Dec. 11, 1926. Claims use since Jan. 15, 1926.

Rat-Nip—This in black letters describing insecticides and disinfectants. Filed by Buffalo Specialty Co., Buffalo, N. Y., Dec. 13, 1926. Claims use since Sept. 14, 1907.

Trade-Marks Granted

222,227—Bath Soaps and Toilet Soaps. E. T. Slattery Company, Boston, Mass. Filed August 17, 1926. Serial No. 236,096. Published October 12, 1926.

222,229—Toilet Soap. The Remiller Co., New York, N. Y. Filed August 16, 1926. Serial No. 236,059. Published October 12, 1926.

222,241—Disinfectants and germicides. Deco Products Company, Inc., New York, N. Y. Filed June 17, 1926. Serial No. 233,362. Published October 12, 1926.

222,252—Soap. The Salamo Soap Mfg. Co., Rural Retreat, Va. Filed August 27, 1926. Serial No. 236,563. Published October 12, 1926.

222,260—Toilet Soap. Western Operating Company, Milwaukee, Wis. Filed August 13, 1926. Serial No. 235,992. Published October 12, 1926.

222,291—Cleanser preferably in powder or crystalline form for general household purposes. Kesite Chemical Company, Inc., Brooklyn, N. Y. Filed July 21, 1926. Serial No. 234,845. Published October 12, 1926.

222,342—Insecticides, deodorants, and disinfectants. Standard Oil Company (New Jersey), Bayonne, N. J. Filed March 18, 1926. Serial No. 228,838. Published September 28, 1926.

222,351—Disinfectants. Minute Chemical Co., Inc., Chicago, Ill. Filed October 24, 1925. Serial No. 222,270. Published October 12, 1926.

222,813 — Insecticide. Gulf Refining Company, Port Arthur, Tex., and Pittsburgh, Pa. Filed September 13, 1926. Serial No. 237,167. Published November 2, 1926.

222,948 — Disinfectant, deodorant, and water softener. Cloverland Chemical Co., Ltd., Hancock, Mich. Filed August 18, 1926. Serial No. 236,115. Published November 2, 1926.

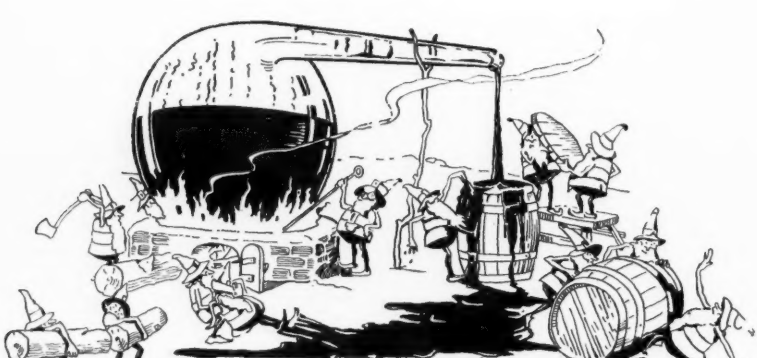
223,097—Soaps in powdered, chipped and shredded form. Colloidal Products Company, Dover, Del., and Baltimore, Md. Filed April 16, 1926. Serial No. 230,283. Published August 31, 1926.

COAL TAR DISINFECTANTS

CRESOL COMPOUNDS

CRESYLIC ACID

ALL PRODUCTS TESTED AND GUARANTEED
PROMPT SERVICE ASSURED TO ALL ORDERS



BAIRD & McGUIRE, INC.

HOLBROOK, MASS. ST. LOUIS, MO.

Warehouse Stocks at

New York City Kansas City San Francisco

Say you saw it in SOAP!

INSECTICIDE AND DISINFECTANT SECTION

Official Publication of *The Insecticide and Disinfectant Manufacturers Association.* Harry W. Cole, Holbrook, Mass., Secretary.

The Commercial Evaluation of Pyrethrum

Showing Oleoresin Content Not in Accord with Actual Killing Power in Determining Value

By Dr. John Glassford, McCormick & Co.

(Before the 13th Annual Meeting, Insecticide & Disinfectant Manufacturers Association.)

IN PREHISTORIC times, man's greatest enemies were himself, the weather and the wild beasts. Now, they are plants and insects. We have some traditional evidence, of course, that there were predatory insects, even in ancient times, also bacterial diseases, and therefore bacteria though they were not recognized as such. But I strongly suspect that there was not as much criminality among plants at the time of the glacial epochs as today. Both they and the insects have progressed in their rascality and developed entirely new species, sunken to far greater depths of depravity. One of my old professors used to say that the bacillus tuberculosis alone killed one-fifth the human race and the bacillus tuberculosis has many fellows in iniquity.

We have made much progress in combating these insidious enemies of ours since Pasteur first detected them at their nefarious work, but they are still far from vanquished. Those of us who are engaged in the manufacture of materials for the destruction of bacteria therefore perform a service of the highest value for the comfort and progress of mankind. Mr. Miller has said that he does not think that we have done our part in educating the public to realize the importance of the destruction of bacteria to the health of the community. The public does not know yet that an ounce of disease prevention is worth a pound of disease cure.

Of importance, second only to bacteria as curses of our mundane existence, are the lesser members of the animal kingdom mostly belonging to that class known as insects. These don't kill us outright, but pester us to death and try to starve us by eating up our food supply before we can. It has been said that we have a tremendous war ahead of us in which all mankind will have to unite against the little thieves that eat our fruits, vegetables, grains and cotton. Because we have killed off their natural enemies they are increasing in numbers and variety at an appalling rate.

Take the Japanese beetle, for instance. It was unknown in America ten years ago and now threatens to spread over the entire country and to become one of the most serious enemies with which the American farmer has ever had to contend. Then there is the recently reported cotton flea or leaf hopper imported from Mexico like the boll weevil and threantening to rival it in the destruction of the staple crop of the South, though it is a pity it didn't eat more of it this year and help the poor cotton planter reduce his surplus.

It is both wonderful and fortunate that nature which has produced the insects which curse us should also have produced plants of the highest efficiency for the destruction of these same insects. In nature's laboratory in the flower of the pyrethrum plant there is produced an insect poison so powerful that it is calculated that 1/260,000 of a grain will kill a healthy roach. The primary object of this paper was to discuss the problem of the valuation of the pyrethrum flowers in which resides this principle of such phenomenal activity.

Physiological Tests Best

OF COURSE, if the pyrethrums were readily extracted and purified like the nicotine in tobacco the valuation of pyrethrum would be very simple, but this is not the case. The isolation of the pyrethrum was accomplished only after years of patient work and their separation from accompanying inert substances is very difficult. I hope that Staudinger and Ruzicka who discovered the pyrethrum will continue their good work and devise a method for their

ready estimation in pyrethrum flowers, but in the meantime other methods of valuing the flowers must be used. In the valuation of drugs it is customary, if the active principle cannot be readily and accurately determined, to resort to physiological tests. It is logical that such a plan should be followed in the case of pyrethrum and I believe that such physiological tests are the only ones worthy of confidence today.

In making these physiological tests, I reccomend that that variety of roach known as croton bugs, water bugs, Blatella Germanca, be used as a standard test insect instead of flies as has been recommended. The roaches can be obtained at any time of year, live well in captivity and are more resistant than flies to the pyrethrum. The test is more readily made as follows:

About half a gram of finely powdered pyrethrum flowers is placed in a two-drachm vial, a lively grown roach is added and shaken gently with the powder till well covered. The insect is then allowed to escape and imprisoned under a small wire cover and observed, noting the elapse of time from the moment of applying the powder till the roach is so far paralyzed that it is no longer capable of locomotion. With a highly active powder this should be within three minutes. At least five tests should be made and the average taken as the killing time.

Oleoresin Content Not an Indicator

IT HAS been recently advocated that pyrethrum flowers be valued strictly according to their oleorsin or ether extract content. While it is true that the pyrethrums are contained in the ether extract, they evidently do not constitute a constant proportion of it, for killing time as determined by the above described method is not at all consistent with the proportion of ether extract contained in the flowers tested. Indeed, an old and quite worthless powder may yield a perfectly normal ether extract, possibly higher than that of a fresh and highly active powder. McDowell and Roark of the U. S. Insecticide and Fungicide Board concur in this opinion and state in Bulletin 824 of the United States Department of Agriculture as follows:

"Although the active insecticidal principles are soluble in ether and certain other organic solvents, the efficiency of the powder cannot be measured by the quantity of this ether extract as now determined because some inactive constituents are also soluble in ether and many of the poorest samples show an ether extract content which is lower than some which are seriously adulterated."

As an example of the absence of correlation between toxic power and oleoresin content, I might mention a sample of powdered Dalmatian flowers which I recently tested and which required an average time of six minutes to paralyze roaches and contained 9.50 per cent. of ether extract; whereas, a sample of better grade of pyrethrum with a toxic value of three minutes contained only 7.25 per cent. of oleoresin.

I believe that the commercial valuation of pyrethrum powder solely in accordance with its oleoresin or ether extract content to be unsound in principle and unfair in practice. If the practice is persisted in it will result in the false commercial valuation of old and worthless pyrethrum and possibly in the sophistication of powders deficient in oleoresin with inert resin.

Pyrethrum insecticides and phenol insecticides, germicides and disinfectants enjoy a fair sale in Queensland, Australia. Names of dealers may be obtained from the Department of Commerce.

Insect exterminators are practically unknown in most sections of the Philippine Islands, according to reports, and are badly needed. It is thought that an aggressive sales campaign, backed up with the right kind of advertising, would open a wide market in the Islands for American made household insecticides.

American manufacturers only get a small amount of New Zealand's disinfectant trade, according to a recent Consul report. Out of total imports, valued at over $20,000 annually, this country only supplies goods valued at around $2,000. The cruder varieties of disinfectants are generally made locally, but the better quality goods are all imported, with "Lysol," imported from Great Britain, bulking largest in the list. The Department of Commerce can furnish manufacturers with complete details regarding the New Zealand market.

A disinfectant fertilizer containing creosote oil has been patented as U. S. 1,609,070. The formula is as follows: limestone sand 500 parts, humus, 1140, animal phosphate 150, animal and fish tankage 150, sawdust 10, sulfur 40, creosote oil 10 parts.

Kentucky Color & Chemical Co., Louisville, manufacturers of tar acid oils and allied products, have appointed A. P. Taylor, Kansas City, agent for the sale of their products. Stocks will be maintained at Kansas City.

New Technical Progress In Disinfectants

Results of Recent Researches in Evaluation and Composition of Germicides as Described by

William H. Gesell
Vice-president of Lehn & Fink,

(Before the 13th Annual Meeting, Insecticide & Disinfectant Manufacturer's Association)

I INTEND to deal first with new developments of the methods of testing disinfectants. No doubt it is known that the present way of evaluation of disinfectants is based upon the method of the determination of the so-called phenol coefficient.

It is not my intention to dwell upon the advantages and the disadvantages of this method. I wish only to point to the fact that there are numerous papers dealing with the subject which indicate that a method of this type is not suited for a general evaluation of disinfectants, since owing to the nature of the chemical substances of which the disinfectant substances are composed, the results obtained with different substances and different micro organisms on which the action is tested, must necessarily be different.

The method of the determination of the phenol coefficient according to Rideal Walker and according to the U. S. Hygienic Laboratory uses bacillus typhosus as the test organism. Work with this micro organism necessitates the upkeep of a bacteriological laboratory and it might therefore be interesting to learn that another method, devised by Luers & Weinfurtner, allows the carrying out of this determination in a much simpler way of observing the inhibitive action of disinfectants upon fermenting yeast.

Use of the Yeast Method

I WISH to add that this yeast method is being used in a somewhat modified manner for the differentiation of strong and mild silver protein compounds. According to the method of Luers & Weinfurtner, the comparison is carried out with a phenol solution of 1:100. Yeast which was brought in contact with this solution is then transplanted into another media and as a rule one observes that such solution does not prevent the fermentation of yeast after three minutes of contact, but the yeast is killed after five minutes. This is regarded as unit of disinfectant action.

A considerable number of papers were published dealing with the relationship between chemical constitution and germicidal action. These studies were carried out on both, substances which are actually used as disinfectants at the present time and upon others which are not yet used for this purpose but are reliable to furnish data on the elucidation of this problem. Researches carried out by Sabalitchka & Dietrich deal with the influence of introduction of substituents into the nucleus of phenols and carboxylic acids. Older reports are confirmed that the introduction of another hydroxyl or carboxyl group into phenols or carboxyl acids reduces the germicidal action. A similar effect is shown upon introduction of sulfo and amino groups into phenols. The introduction of amino groups into cyclic hydrocarbons increases the germicidal effect. The effect of the chlorine depends upon the compound into which it enters. Salt formation considerably diminishes the germicidal action of aromatic acids while the esterification or etherification of some phenols and phenol acids has the opposite effect. These tests were carried out on the micro organisms penicillum glaucum micrococous candicans, sarcina flava and b. coli.

A considerable number of data is given on the relationship between the chemical constitution and germicidal action in a paper by Ishiwara. While amino and alkyl derivatives of benzene are practically without effect, the presence of an amino and an alkyl group which are attached to different carbon atoms, lead to a germicidally active compound, e. g., toluidine. Azo and azoxy compounds are actively germicidal. The germicidal action of phenol is increased by the introduction of alkyl groups. Aldehyde groups enhance the germicidal action more than hydroxyl groups. Iodine in combination with organic compounds may increase the germicidal action considerably, but this increase is accompanied by an undesired organotropic effect. The germicidal action of aliphatic organic acids is increased by the introduction of chlorine atoms. Thus aminochloroacetic acid is much more active than acetic acid, but, on the

About Pine Oil Disinfectants

Recent findings of the Insecticide and Fungicide Board of the U. S. Department of Agriculture indicate a much wider field for the use of pine oil disinfectants and a large increase in their sales. Research by the Board has shown greater effectiveness against germ life and in a field much broader than previously accepted. The result will be a marked expansion in the demand for this type of disinfectants.

Yarmor Steam-Distilled Pine Oil is being sold to disinfectant manufacturers in steadily increasing quantities. The quality is uniform and the supply is dependable.

Let us send you a test sample to determine and prove its worth.

HERCULES POWDER COMPANY
(INCORPORATED)

961 Market Street, Wilmington, Delaware

Largest producers of pine oil and wood rosin in the world

HERCULES POWDER COMPANY
961 Market Street
Wilmington, Delaware

Please send me a test sample of Hercules Yarmor Pine Oil.

Name .....

Company .....

Street .....

City ..... *State* .....

other hand, trichloracetic acid is not more active than the monochlor product. There are many similarities between the germicidal action of inorganic and organic metal compounds, the latter being, however, less organtropic.

Attention should be called to a paper by Cooper and Forstner who distinguish between the physico-chemical and chemical action of disinfectants. According to these authors, phenol interferes with the colloidal state of the protoplasm and it is, therefore, to be regarded as a physico-chemical agent. On the other hand, it is assumed that other compounds, e. g., nitroso derivatives, are purely chemical agents on account of their direct reaction with the organic matter of the micro organism. Attention should be called finally to a paper by Klarmann which brings the tautomeric configuration of substituted polyphenols in relation with the germicidal action. A number of compounds with high phenol coefficients of the series of dihydroxy diphenyl hydrocarbons is described.

Use of Waste Products

IT IS one of the foremost tasks of the technology of disinfectants to attempt the preparation of products which would be cheap and thus allow an extended use in daily life. This goal may be reached either by having cheap materials on hand which could be used in larger quantities, or to increase the germicidal action to such an extent that extremely diluted solutions might be used, so that the price of the preparations would not impede their application. It is natural that the preparation of substances which can be used in large quantities presupposes their low toxicity. All industries, including the industry of disinfectants, must pay attention to the utilization of waste products for their particular purposes. In this connection, it is to be pointed out to the very favorable results which were obtained with the application of chlorinated natural bark extracts and sulphite liquors of cellulose manufacture. Direct application of compounds which contain chlorine in an active form, i. e., in such a state that chlorine is split off in the presence of susceptible organic matter, has attained a rather wide scope.

It suffices to mention that some of the organic chlorine compounds are obtainable in a state of comparatively high purity, solubility and stability. On the other hand, it seems that there are micro organisms which survive the action of chlorine. It is, therefore, necessary to keep this point in mind in disinfecting water of pools or drinking water with active chlorine preparations.

Ammonia-Chlorine Effective

ACCORDING to researches of Olshewski, the disinfectant with a combination of chlorine and ammonia is more thorough than with chlorine alone. This holds particularly for the purification of river water. The most advantageous ratio is 1½ parts of ammonia gas to one part of chlorine gas. A further advantage of this method is the elimination of the objectionable chlorine odor.

No particularly new data were obtained on the preparation of disinfectants composed of tar distillates. The coal-tar disinfectants may contain different substances which serve as emulsifiers. A widely used emulsifier is soap, which may be prepared from various sources. More attention must be paid to this problem of soap in coal tar disinfectants with view to some papers on the germicidal action of soaps. Soap is important from two viewpoints—first, on account of its nature as emulsifier and, secondly, as a depressant of surface tension. It is interesting that a differentiation of bacteria may be based upon their ability to grow at different surface tensions. Sodium oleate is best for such experiments in reducing surface tension, while the addition of charcoal increases surface tension.

The outspoken germicidal action of soap is shown in the work by Tilley and Schaffer. Thus saponified cocoanut oil is more germicidal than saponified linseed oil. The germicidal action of soap is increased by the addition of sodium chloride. However, the practical value of the addition of sodium chloride is diminished on account of flocculation in the presence of serum.

Soap and Phenol Ratios

THE relation of soap and phenol derivatives is of extreme importance. While the application of cocoanut soap is recommended for mixtures with cresol, it is pointed out that a mixture containing one-half as much soap as cresol shows the maximum germicidal efficiency. A further increase of soap causes a reduction of the germicidal action. Walker showed in an interesting paper that the degree of saturation of the organic acid of the soap is of importance, since different bacteria show a different resistance to soaps. Thus dysentery and paratyphoid bacteria are killed by soaps of saturated fatty acids, but are completely resistant to unsaturated ones. He also recommends cocoanut oil soap for dysentery, paratyphoid and typhoid. Zernik describes an interesting type of disinfectant which is obtained by neutralization of alkaline creosote liquor of bitum-

inous coal distillation with naphthenic or naphthene sulphonic acids. An interesting preparation is a mixture of saponified cresol with chloroform, which, it is claimed, possesses a germicidal action similar to that of phenol but it does not irritate human skin.

These remarks may suffice for a general characterization of progress in the individual groups of disinfectants. We still will have to deal with some synthetic preparations which are regarded as more important. A disinfectant of a comparatively high germicidal efficiency is obtained by mixing ortho or para dihydroxy diphenyl with suitable organic solvents or soap. It is contained in the distillation residue of synthetic phenol. Fractions of low coal tar distillation, boiling between 230 and 300 degrees at ordinary pressure are used for the preparation of disinfectants. A British patent describes the application of furfurol as fungicide and disinfectant. Violle recommends the application of chloropicrine as an excellent antiseptic which is active in dilutions as high as 1:40,000 to 1:80,000. It is claimed to be better than chlorine and iodine. It is stable in sealed containers and has, on account of the extreme dilutions in which it may be used, a comparatively low toxicity. It will be remembered that chlorolicrine played an important role in the chemical warfare of the World War.

The Tellurium Compounds

AN extremely interesting group of preparations are the tellurium compounds. It was known that tellurium acid tartrate is as effective as phenol against b. coli or typhosus and that potassium iodotellurite has a high phenol coefficient in the absence of organic matter. Morgan and Corby showed that cyclo telluro pentane—3, 5—diones are extraordinarily powerful disinfecting agents, the disinfectant action being observed in dilutions as low as 1:1,000,000 to 1:20,000,000. The maximum effect is observed after four hours. In spite of the poisonous nature of these compounds the safety margin is sufficiently large. They retain to a large extent their germicidal effect in urine and are recommended for cystitis and eye infections. Unfortunately, the action is virtually completely lost in the presence of albuminous matter (serum). It is perhaps interesting to point to the germicidal halogen compounds which were prepared by Erlich and Bechhold and had not achieved any importance since their germicidal action is also reduced to practically nothing in the presence of albuminous matter. A number of new preparations were created which contained the metals cerium and thallium respectively as active ingredients. The preparation of isotonic solution of cerium iodide is described in a paper by Potratz. A cerium quinoline compound is recommended as a non-irritant disinfectant instead of tincture of iodine.

Considerable research work has been done generally on the oligodynamic action of metals. The germicidal action of such oligodynamic solutions is assumed to be due to a combination of protein binding and oxygen catalysis and subsequent dehydrogenation. The oligodynamic action is eliminated by reduction of the mobility of ions which may occur on account of oxidation or formation of carbonates.

Fatty Acids—Copper Compounds

COPPER salts of fatty acids in paraffin, alcohol, or other organic solvents, except phenol or cresol, e. g., copper oleate in paraffin or vaseline oil, are recommended as effective disinfectants and insecticides. It is shown experimentally that the preparation usually penetrates the bodies of organisms and soon the green coloration betrays the presence of copper within the body. It is not intended to further dwell upon the metal organic compounds since they do not belong in the immediate sphere of our interest, being of more importance in chemo-therapy. Selenium compounds also found application as insecticides and disinfectants. Among the organic preparations, mention should be made of condensation products of tetra-, penta- and hexa-methylene carboxylic acids with keto alcohols. These products are used for disinfection and destruction of plant parasites and resemble in their constitution the compounds which form the active principle of so-called Persian insect powders.

It is to be seen from this report that a considerable amount of research remains to be done on the basic principles of all branches of technology of disinfectants and there are still many questions to be elucidated. We may say that we are still rather far from the ideal disinfectant from which we would have to expect a high bacteriotropic and a low organotropic action which would direct itself against all kinds of micro organisms and would not be impaired by the presence of organic matter. In considering the different nature of the bodies of micro organisms, it is necessary to find out the cases in which a high liquid solubility is desired and the others where stress is to be laid on chemical reactivity. Since the theory of disinfection has of late attracted considerable attention of both organic chemists and biologists, it is to be expected that quick progress will be made in the future.

Cold Process for Deodorizing Blocks

New Method of Paradichlorbenzene Block and Tablet Perfuming and Coloring Without Melting

By Albert Albek
Sales Manager, Felton Chemical Co.

THE sharp increase in the consumption of paradichlorbenzene for the manufacture of deodorizing blocks, moth repellants, and similar products has led to an investigation of a means to avoid the slow and expensive process of melting and moulding these products. The hot process wherein the paradichlorbenzene is melted not only involves many operations which prolong and unnecessarily delay the process of manufacture, but it also involves a fire risk, where direct heat is used, and a very expensive loss in perfuming materials due to their great volatility at the higher temperatures.

As is generally known, paradichlorbenzene is a white crystalline substance having a characteristic odor. It vaporizes at ordinary temperatures forming a gas heavier than air. This gas is non-poisonous to human beings or animals, but is poisonous to clothes moths and other fabric pests when they are exposed to it in closed places where air does not circulate freely. It also has the power of enveloping or mixing with various odors and masking them in such a way as to eliminate their unpleasantness where present. It will not injure fabrics, and is more effective as an insect repellant than napthalene. Five American manufacturers now produce it and offer it in various crystal sizes and forms for insecticidal and deodorizing uses.

Due to the larger use of paradichlorbenzene blocks and tablets and the need of more rapid production, a process for perfuming and coloring the crystals without melting or heating was investigated by Dr. Joseph Felton. Difficulties presented themselves in first securing a combination of colors and odors which could be applied in a single operation so as to secure uniformity of color and odor. Then came the problem of making the odor and color penetrate the salt and not remain merely as an oily coating around the individual crystals. These problems were solved, but out of several hundred odor combinations which were tried out, only eight or ten were found which would cover or blend correctly with the odor of paradichlorbenzene. These color-odor compounds or coloromes as they are called were found to work best when mixed in proportion of a half ounce to every pound of salt, or one pound of color-odor to 32 lbs. of paradichlorbenzene.

The physical handling of the materials was cut down to as simple a process as possible. In actual operations, the salt was merely spread out on the clean floor space, the odor-color added and the whole mixed with an ordinary shovel. Of course, where large operations make it worth while, a machine mixer can handle the material more efficiently and do the mixing somewhat more quickly. However, the use of shovel mixing works out very well, a uniform color of all crystals indicating complete mixing. The mixed material is then either ready for filling into shaker top cans or to be pressed into blocks or tablets.

The machines for pressing the blocks were not easy to find. Those which apparently work out to best advantage are ones which are designed primarily as soap cake presses. With the cooperation of the Houchin-Aiken Co. of Hawthorne, N. J. and the F. J. Stokes Machine Co., of Philadelphia, the problem of forming the cold, colored and perfumed paradichlorbenzene into balls, tablets, blocks or slabs, was solved. Automatic soap presses with dies carrying the manufacturer's name or other wording did a very good job. The rotary compressor of the Stokes company turned out moth balls and small tablets at a high rate of speed which were neat and solidly formed. The finished products are equally as well made as those made by melting and moulding. They have the added advantage in that the color is not changed as the result of heating, and also that all the perfuming materials which were placed in the original batch are in the finished blocks. Practically none is lost, as is the case where the volatile odor materials are added to the melted paradichlorbenzene. The new process was designed primarily as a means of speeding up production without materially increasing the floor space or equipment required. This, it has been found to do by cutting down the length of time required to put the batches,

Trade Mark

HEX

Reg. U. S. Pat. Off.

TAR ACID OIL

Chilled - Filtered and Pressed - No Sediment

Makes up a milk white emulsion with a good odor.
No waste—cheapest in the long run

TAR PRODUCTS CORPORATION

REFINERS AND MANUFACTURERS

PROVIDENCE, RHODE ISLAND

Office—99 Empire St. Works—East Providence

Zef-ir Blocs and Crystals
Zef-ir Blockettes
LIQUA-SAN
Concentrated Liquid
Soaps . . . .
Scrubbing Compounds
Rex Pine Scrub Soap
Rex Crystals
Clogged Drain Opener
Liquid Insecticide
Liquid Waxes

FROM HUNTINGTON LABORATORIES

Laboratory Products

HERE are products that *sell* because they *serve better*. The Laboratory Method of manufacture we have adopted assures absolute uniformity and standard quality, yet our prices are right in line.

You can depend on a good product, good service, right price and fair treatment—plus a product that has genuine salability because of unusual merit. Let us quote on your requirements and send samples.

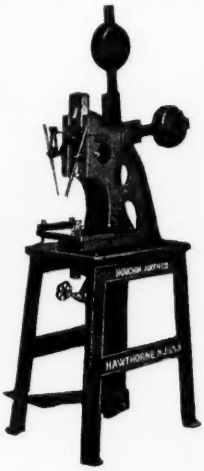
Wholesale Department

HUNTINGTON LABORATORIES, *Inc.*

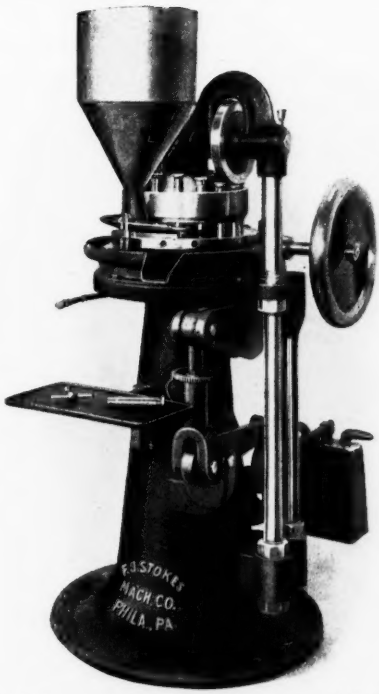
HUNTINGTON, IND.

from raw materials to finished blocks, through the plant.

For the manufacture of napthalene balls and tablets, the same process was found to be applicable also. The perfumes and colors worked out in much the same manner. The process, however, was designed primarily for paradichlorbenzene.



Houchin-Aiken No. 4 soap press which is being used successfully to punch out para deodorizing block and cakes. Pressed cakes made same as in soap manufacture except tray is attached for catching excess crystals. Dies carry name of product or other lettering as desired.



Stokes rotary tablet machine for naphthalene or paradichlorbenzene moth balls or tablets. After mixing and removal of lumps, material ready for making tablets is fed into hopper and finished product ejected automatically. Density and thickness of cake can be controlled by adjustments; diameter standard according to dies.

Brenn Heads Huntington Labs.

At the annual meeting of directors of the Huntington Laboratories, Huntington, Ind., J. L. Brenn was elected president and general manager. He was formerly secretary and manager of the company. B. Alexander was elected vice-president and sales manager, and H. W. Hoch, secretary and treasurer. At the annual stockholders' meeting, the following were chosen directors for the coming year: J. L. Brenn, B. Alexander, H. Feldman, W. J. Whitelock, F. W. Wickenhiser and Eugene Zahm. Reports for 1926 showed it to be a very profitable year for the company and a sharp increase in the volume of business. In electing Mr. Brenn unanimously, the directors gave credit for the remarkable growth of the firm during the past few years to their new president. He is well known in the disinfectant and allied industries, active in the affairs of the Insecticide & Disinfectant Manufacturers Association, and has long been a crusader for higher standards in the trade.

Among the industrial exhibits being held under the auspices of the Cleveland Chamber of Commerce, the January 18 luncheon and exhibit of paints, oils and chemicals, included disinfectants and insecticides for the first time. The disinfectant industry was represented by The George L. Williams Co. of Cleveland. Grasselli Chemical Co. was a leading exhibitor in the chemical section. Over 2,400 persons attended the luncheon and exhibit. The insecticide and disinfectant exhibit was reported as one of the best given thus far in the Chamber of Commerce series.

A bill requiring state registration of all insecticides and fungicides sold in the State of North Carolina and also printing of formula and ingredients on the label, was introduced late in January in the legislature there. It has been reported out of committee favorably. It is known as House bill No. 241. Dry and liquid household insecticides are included in its scope.

Enoz Chemical Co., Chicago, and the Clifton Chemical Co., New York, were recently elected members of the Insecticide & Disinfectant Manufacturers Association.

A deodorizing material for the feet, composed of formaldehyde and alum, has been held dutiable as a toilet preparation, in a recent decision of the United States Customs Court.

INSECT POWDER

Granulated Flowers

in bulk to the trade for repacking or percolating

WRITE FOR SAMPLES AND PRICES

Mc CORMICK & Co., INC.

BALTIMORE, MD.

Spice and Drug Millers - Specialists in Pyrethrum

Perfumes for

INSECTICIDES and DISINFECTANTS

Our laboratories, after conducting a thorough research with the above products, have finally perfected a series of perfume oils which will not only overcome the heavy and pungent odor of the chemical constituents in these two bodies, but will also impart a fragrant note to the finished material.

The minimum cost of these perfume products enables us to offer them at exceedingly attractive figures.

WANGLER-BUDD COMPANY, Inc.

35 FULTON STREET NEW YORK

Cable Address: Julyon, N. Y.

Telephone: Beekman 3040

Exclusive Agents for the United States and Canada for:

Polak & Schwarz, Ltd.
Zaandam, Holland

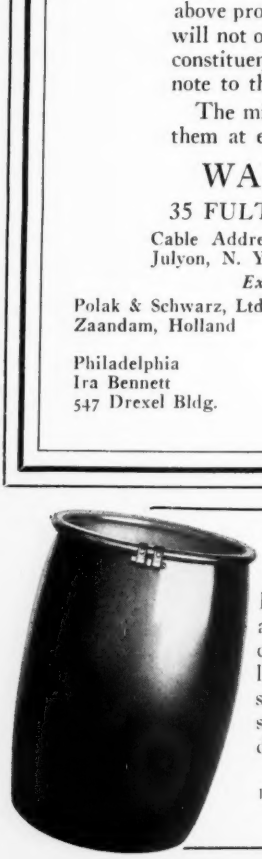
Soc. Anon. La Zagara,
Reggio-Calabria, Italy

Representatives of Wangler-Budd Co., Inc.:

Philadelphia
Ira Bennett
547 Drexel Bldg.

Special
Wm. A. Susanka

Chicago
A. C. Drury & Co.
106 E. Austin Ave.



Barrels That Cut Shipping Costs

Hackney Removable Head Barrels are everywhere cutting shipping costs for users. They are absolutely liquid tight. Their seamless construction provides the sturdy strength that defies rough usage—makes them capable of going trip after trip without a repair. And these things make for lower shipping costs. A card will bring you more complete information.

PRESSED STEEL TANK COMPANY
5739 Greenfield Avenue
MILWAUKEE, WIS.

1159 Continental Bank Bldg.
CHICAGO, ILL.

Hackney

1335 Vanderbilt Concourse Bldg.
NEW YORK, N. Y.

Say you saw it in SOAP!

Issue List Permitted Disinfectants

The Bureau of Animal Industry, Department of Agriculture, has issued a list of saponified cresol solutions for the disinfection of railroad cars, yards, and other premises, which it terms "permitted disinfectants". The list with names of manufacturers, follows:

"Acresel Cresol Compound;" The Selig Company, Atlanta, Ga.

"Anchor Brand Cresol Compound;" The Antiseptic Products Co., Denver, Colo.

"Atlas 50% Cresol Compound;" Chipman Chemical Engineering Co., N. Y. City.

"Clarisol;" International Chemical Co., Chicago, Ill. (Also distributed under name of: "Buckeye Brand Saponified Cresol Solution;" Columbus Serum Co., Columbus, Ohio.)

"Cooper's Saponified Cresol Solution;" Wm. Cooper & Nephews, Chicago, Ill. (Also distributed under name of: "Blue Cross Saponified Cresol;" Blue Cross Veterinary Supply Co., Superior, Nebr.)

"Cre-O-Cris;" Rochester Germicide Co., Rochester, N. Y.

"Cre-Septic;" Theo. B. Robertson Products Co., Chicago, Ill.

"Cresol Compound Clifton;" Clifton Chemical Co., N. Y. City.

"Crestall Dip;" Baird & McGuire, Holbrook, Mass. (Also distributed under names of: "Booth's Cresol Compound;" J. M. Booth Chemical Co., El Paso, Texas.

"Carbola Liquid Disinfectant;" Carbola Chemical Co., Inc., Natural Bridge, N. Y.

"Chemo Cattle Disinfectant;" Chemo Company, Buffalo, N. Y.

"Coliseptol;" Beebe Laboratories, St. Paul, Minn.

"Cresolave;" The Chemical Supply Co., Cleveland, Ohio.

"Creco Special;" United Sanitary Products Co., Inc., N. Y. City.

"Dinsol;" Meyer Brothers Drug Co., St. Louis, Mo.

"Dr. LeGear's Cresol Disinfectant;" Dr. L. D. LeGear Medicine Co., St. Louis, Mo.

"Economy Disinfectant;" Economy Hog & Cattle Powder Co., Shenandoah, Iowa.

"Hockwald's Creo-Lic Dip;" Hockwald Chemical Co., San Francisco, Cal.

"Kre-Like;" J. F. DeVine Laboratories, Inc., Goshen, N. Y.

"Li-Cresol;" The Jensen-Salsbery Laboratories, Inc., Kansas City, Mo.

"Tri-Krecide;" Pitman-Moore Co., Indianapolis, Ind.

"U-C-Cos Cresolis;" United Chemical Cos., Kansas City, Mo.

"Zelco Disinfectant;" The Sanitary Products Corporation, N. Y. City.

"Cresyline Cresol Compound;" The Hunt Manufacturing Co., Cleveland, Ohio.

"Creusan Saponified Cresol Solution;" U. S. Sanitary Specialties Corporation, Chicago, Ill. Also distributed under name of: "Krefecto No. 2;" San Antonio Drug Co., San Antonio, Texas.)

"Dr. Hess Saponified Cresol Solution;" Dr. Hess & Clark, Inc., Ashland, Ohio.

"Germo-Cresolis;" Germo Manufacturing Co., St. Louis, Mo.

"Glidden Shur-Shot Disinfectant;" The Glidden Company, Cleveland, Ohio.

"Karspray;" West Disinfecting Co., N. Y. City.

"Key-State Disinfectant;" Interstate Chemical Co., Jersey City, N. J.

"Kremulso;" Leeds Chemical Company, Kansas City, Mo.

"Licresolis;" West Disinfecting Co., N. Y. City.

"Lilly's Cresol Compound, U. S. P.;" Eli Lilly & Company, Indianapolis, Ind.

"Masol;" Charles B. Rodes, Kansas City, Mo.

"Mapco 50% Cresol Compound;" Michel & Pelton Co., San Francisco, Cal.

"Midland Cresol Compound;" Midland Chemical Co., Dubuque, Iowa. (Also distributed under name of: "Cresylol;" Norden Laboratories, Lincoln, Nebr.)

"Moorman's Saponified Cresol;" Moorman Manufacturing Co., Quincy, Ill.

"NSCO Cresol Compound;" National Supply Co., Birmingham, Ala.

"Parke Davis Co. Compound Solution of Cresol, U. S. P.;" Parke, Davis & Co., Detroit, Mich.

"Pennsylvania Railroad Saponified Cresol Solution;" Pennsylvania R. R. Co., Altoona, Pa.

"Red Seal Liquor Cresolis Compound;" Shores-Mueller Company, Cedar Rapids, Iowa. (Also distributed under names of: "Fort Dodge Saponified Cresol;" Fort Dodge Serum Co., Fort Dodge, Iowa.

"Holt's Liquor Cresolis Compound;" Howard Holt Co., Cedar Rapids, Iowa.)

"Reilly's Cresolis Compound;" Republic Creosoting.
Co., Merchants Bank Bldg., Indianapolis, Ind.

"Rizdol Compound Dip and Spray;" Sanatory Chemical Co., Louisville, Ky.

(*Continued on Page 79*)

INSECT POWCO BRAND POWDER
REG. U.S. PAT. OFF

We handle PYRETHRUM exclusively.
Therefore we are true Specialists.

POWCO BRAND Insect Powder is your assurance of definite and consistent quality. Why take a chance?

JOHN POWELL & CO., INC. 12 WATER ST., NEW YORK

Mills and Warehouses
477-91 Keap St., Brooklyn

Hopkins Crow Brand

INSECT POWDER

Made from analyzed closed Dalmatian Insect Flowers.

We import and mill this one grade exclusively—the best.

Always higher in quality than in price

J. L. Hopkins & Co.

135 William Street **New York**

PARADI

Trade Mark Reg. U. S. Pat. Off. 161837

Paradichlorbenzene

Specially prepared for

Moth Preventatives

and

Deodorizing Blocks

For Immediate Shipment in 200, 100 or 50 Pound Barrels

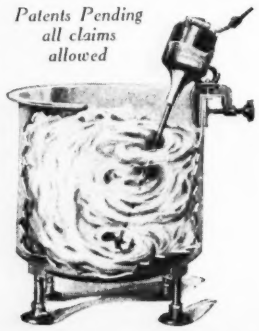
Write Us For Prices

HOOKER ELECTRO CHEMICAL CO.

Sales Offices
25 PINE STREET
New York City

Works
NIAGARA FALLS
New York

Patents Pending all claims allowed



"LIGHTNIN"

The Original and World's Best Electric Portable Mixers

THOUSANDS IN DAILY USE

FEATURES—Clamp on Any Tank, Telescopic Shaft, Universally Adjustable, Vertical Motors, Strongly Housed, Built for Years of Use, Less Machinery and Better Results.

ALL SIZES AND SPEEDS

For Fastest and Best Mixing of all Liquids

Disinfectants—Insecticides—Oils—Soaps
Perfumes—Fats—Chemicals etc.

Write for catalog 33

MIXING EQUIPMENT COMPANY, Inc.

229-233 EAST 38th STREET **NEW YORK, N. Y.**

Say you saw it in SOAP!

Leon A. Smolen who has been connected with John Opitz, Inc., New York insecticide manufacturer for the past eight years as retail trade contact man, recently severed his connection with the company and will handle the sale of drug trade specialties to the retailer in the New York and New Jersey districts on his own account hereafter. Opitz now sell only through the jobbing trade.

G. R. Rinke of John Powell & Co., New York, sailed Jan. 28 on a business and pleasure trip to the Mediterranean. He will be gone several months and will visit the Dalmatian pyrethrum district for his firm.

Caustic or corrosive preparations, offered for sale in Massachusetts, will have to be labelled "Poison," if a bill, now pending before the Legislature of that state, is passed. The measure was introduced by Representative Henry L. Shattuck, of Roxbury, and has been indorsed by numerous physicians.

Charles P. McCormick of McCormick & Co., Baltimore, was elected vice-president of the Mayonnaise Manufacturers Association of America at its recent meeting in Atlantic City.

CRESYLIC ACID

All Grades

Cresol U. S. P.

Cresol Compound

Tar Acid Oils

For
Disinfectant Makers
Any Strength
Frozen and Filtered

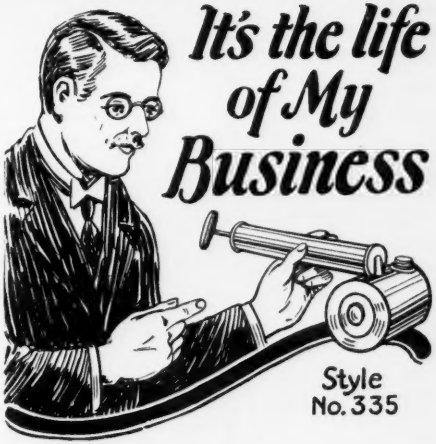
Coal Tar Products

Nicotine Sulphate

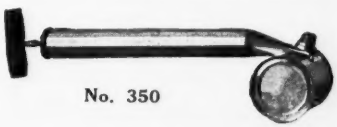
WM. E. JORDAN & BRO.

2590 Atlantic Avenue, Brooklyn, N. Y.

Telephone: Glenmore 7318-7319



"I spent time, money and effort to perfect my product," says a manufacturer of insecticides, "but a large measure of its success is due to the ACME Sprayer. With a sprayer that always works just right, the consumer uses my product oftener, hence gets better results and buys again and again. The ACME Sprayer makes it easy for them to use my product—makes satisfied customers."



No. 350

Is Your Product Worthy of a GOOD SPRAYER?

Our capacity, experience and equipment permit us to give you the right kind of sprayer at a favorable price. You can depend on prompt delivery, too. Our factory capacity has recently been doubled by a new addition. If our large line does not contain what you want, we will design a sprayer to your specifications. Every ACME Sprayer is guaranteed.

Write us your requirements
We will submit samples and prices

POTATO IMPLEMENT CO.
Dept. 34
Traverse City, Michigan

World's Largest exclusive manufacturers of hand operated sprayers and planters

TRADE MARK ACME REGISTERED

We specialize in

EXPORTING

Soapmakers' Raw Materials

Cocoanut Oil, Palm Kernel Oil, Palm Oil, Tallow, Grease, Caustic Soda, Soda Ash, Silicate of Soda, etc., are all carried in stock and immediate shipments can be made.

Correspondence in either Spanish or English

Welch, Holme & Clark Company

563 GREENWICH STREET -:- NEW YORK CITY

THE SUPERFOS COMPANY

535 PEARL STREET NEW YORK, N. Y.

Sole American Distributors of electrolytic

CAUSTIC POTASH

90/92% Westeregeln Brand

Fused, Broken, Flakes and Powder

Manufactured by the CONSOLIDIRTE ALKALIWERKE

90% **actual KOH guaranteed**

Imported CHLOROPHYLL, Oil and Fat Soluble

Manufactured by HOLZVERKOHLUNGS INDUSTRIE

Direct Importers of

Prime Italian OLIVE OIL FOOTS

FLUOSOUR. The Ideal Laundry Sour. FLUOREX. A Concentrated Fluorine Insecticide.

Manufactured by the AMERICAN FLUORIDE CORPORATION

Say you saw it in SOAP!

Market Report on

TALLOW, GREASES AND OILS

(Written Feb. 7, 1927)

A firming cottonseed oil market, coupled with increasing interest in consuming quarters, has sent most of the items in this market to somewhat higher price levels. Reports indicate, however, that not a little of the buying may be attributed to short interests, since a considerable number of consumers covered some time ago, when the market was considerably lower than it is today. Cottonseed oil led the list in advancing and tallow, greases and palm oil followed suit. Olive oil foots are slightly under last month's closing figures, but commercial olive oil has not changed materially. Coconut oil is fractionally lower, but higher quotations are named for futures. On the whole, the general tone of the market is much better than it was a month ago and the expected improvement has materialized. While, at the present time, consumers are not particularly active, they have been sufficiently interested to keep stocks from piling up on spot. The trade expects a continuance of fairly good business with no radically lower prices in prospect.

Cottonseed Oil

Buyers have been fairly active in this market in the past month and cottonseed oil's position is considerably improved. The last week opened with P. S. Y. at 8½c for immediate delivery, crude being named at 7c. Steady gains, registered throughout the week, left crude oil at 8c and P. S. Y. at 8¾c. Large purchases, by a large soaper, late in the week, aided considerably in bolstering the market. Renewed discussion of the McNary-Haugen farm bill also furnished some bullish sentiment. If this goes through the cotton farmer's position will probably be improved substantially and oil will not be offered as freely as heretofore.

Tallow

Last sales were at 7½c a pound, but reports indicate that there are no more sellers at this figure. Holders are generally asking 7¾c. No quantities, of particular consequence, are available now, but since most of the consumers covered at 7½c and lower, interest has fallen off. Reports in some quarters indicate that no lower offers may be expected, at least for the time being, and that even higher prices may prevail.

Coconut Oil

Coconut oil presents a hard problem to figure—higher prices are talked in most quarters, but sales are fractionally under those made a month ago. Spot or nearby goods are named at 8¼c coast, with from 8⅜c to 8½c asked for forward shipments. Holders are quoting from 8¾c to 9c for tanks, spot New York, but recent sales have been made at 8⅝c. Barrel prices are a cent higher than these figures. Trading is brisk in most directions.

Palm Oil

During the past month this oil has moved farther up the scale placing it even more out of line, as compared with other related products. Buyers are showing a steady interest, however, and sellers report doing a fair business, all out of proportion to prevailing prices. Spot lagos ranges between 8½c and 8¾c, with futures named at 8¼c. Niger, for spot delivery, is offered between 7¾ and 8c, shipment prices being named from 7⅜ to 7½c. Considerable spot oil has been taken off the market, in the past two weeks, and goods available for prompt delivery are generally believed to be limited.

Palm Kernel Oil

Continues to be of practically no interest to the soap trade. Spot goods are down to little or nothing, with no real market named. Sellers are offering shipment casks at 9c.

Olive Oil Foots

Goods have sold up to 10½c on spot, in the past month, although holders are generally naming between 9¾ and 10c at this time. Oil for February arrival is offered at from 9½ to 9¾c, according to quantity and seller. Futures are at 8¾c. Spot supplies are very light, but lower Italian exchange has had a softening effect on the market. Producers are offering their goods very sparingly.

Olive Oil

Almost anything is being paid for commercial olive oil, according to who the seller is. Spot offerings are limited and not much additional oil is available to arrive. From $1.50 to $1.55 is the general market, although sales at from $1.60 to $1.70 a gallon have been noted.

Corn Oil

Strength in cottonseed oil has been reflected in a firmer market here. Crude oil is named

Vegetable Oils

Coconut Oil — *Olive Oil*
Palm Kernel Oil — *Olive Oil Foots*

Tallow
Oleo Oil

Grease
Oleo Stearine

FREY & HORGAN

25 BEAVER STREET - NEW YORK

Telephones
Hanover 5527-28-29

Cable Address
"Freyhorgan"

To keep in touch with the
British Soap and Allied Industries
you should read

THE

BRITISH SOAP MANUFACTURER

A MONTHLY JOURNAL READ BY ALL SOAP-MAKERS, ESSENTIAL OIL DISTILLERS, PERFUME MANUFACTURERS, ETC.

THE ONLY ORGAN IN GREAT BRITAIN DEVOTED EXCLUSIVELY TO THE SOAP INDUSTRY.

Contains the best technical articles. Gives all the Trade News, Current Market Prices, Foreign Report, etc., etc.

Annual Subscription $2

30, RED LION SQUARE,
LONDON, W.C. 1.

Say you saw it in SOAP!

between 7¾c and 8c a pound in tank cars at mills. Offerings are light.

SOYA BEAN OIL

Larger supplies and a slower buying demand has caused a small reduction in soya bean oil, during the period closing. Tank cars at the Coast are named inside at 9¼c a pound.

GREASES

General strengthening in the oil list has been reflected in higher prices for all grades of grease. A half cent advance has been registered. House and yellow goods are inside at 6⅝c with white selling at from 7½c to 10c a pound.

H. Mart Smith, W. R. Grace & Co., New York, has been nominated for president of the New York Oil Trades Association for the term 1927-28. Joseph C. Smith, of the Smith-Weihman Oil Co., New York, has been again renominated for secretary of the organization. The elections will be held March 8, at the annual meeting.

The latest copra market report transmitted to the Department of Commerce was dated Jan. 28 and named delivered Manila goods at 12¼ pesos per picul. This represented a small decline from previous levels. All mills were reported operating, with arrivals fully up to normal.

Classified Advertising

(*From Page* 81)

New York available at once. About 400 sq. feet divided into two offices. Outside offices with windows around two sides. Very light. Overlooking downtown New York. Lease runs to May, 1928. Can be had at low price. Write to Box No. 182, care of SOAP.

Equipment For Sale—100—1,000 soap frames, mixer, copper kettles and vats, two stills, evaporator, two fan blowers, various dies. Write for particulars to H. H. Mannheimer, 211 East Park Drive, Evansville, Ind.

For Sale—Save $1,000.00, buying this Dopp steam jacketed kettle; 650 gallon capacity, 2 in. style A cast through opening. Style B Agitator with legs to give 24 inch clearance. This kettle is brand new, tested and tight at 150 lbs. hydrostatic pressure. Complete with cut gears, gear guards, tight and loose pulleys, split bearings, etc. Original price $1,984.50. First check for $900.00 takes it. F. O. B. Dubuque. Midland Chemical Laboratories, Inc., Dubuque, Iowa.

T W I T C H E L L

Liquid Kontakt
SAPONIFIER
for
High Grade
Fats

Kontakt D. P.
SAPONIFIER
for
Low Grade
Fats

The
TWITCHELL PROCESS CO.
St. Bernard
Ohio

P R O C E S S

DIRECT IMPORTERS OF QUALITY
OLIVE OIL FOOTS

Also Headquarters for
Red Oil (Oleic Acid)
Distilled and Saponified
Stearic Acid
76% Caustic Soda
58% Soda Ash

E. M. Sergeant Company
501 Fifth Avenue - New York

MYSORE GOVERNMENT

East Indian Sandalwood Oil

SOLE DISTRIBUTORS

Essenflour Products, Ltd.

Mysore S. India

Distillers of Essential Oils and Manufacturers of Perfumery Products

THE Mysore Government distills and sells only one grade of Oil, a strictly pure genuine Sandalwood Oil put up in distinctive cans and cases, labelled and serially numbered. Oil supplied in other styles of containers may be U. S. P., but we can accept no responsibility for its genuineness or its freedom from adulteration. The buyer who specifies Mysore Oil should receive it in original containers and is then absolutely protected. This oil we offer exclusively in labelled containers. Further protection is insured by the smaller label placed over the cap. This label is numbered and a complete record of each case shipped is kept by us.

For your own protection, insist on Original Cans and Cases

PACKED IN 100-LB. CASES—EACH CASE CONTAINS 4 25-LB. TINS
SUPPLIED THROUGH YOUR JOBBER

COX, ASPDEN & FLETCHER

Sole Agents in U. S. A.

26 CORTLANDT STREET NEW YORK CITY
PHONE—RECTOR 4586 CABLE ADDRESS—COXASPDEN, N. Y.

Say you saw it in SOAP!

Market Report on

ESSENTIAL OILS AND AROMATICS

(As of February 7, 1927)

FOLLOWING a year of declining prices in the essential oil markets, the end of January and the beginning of February saw the most extensive upward movement in prices which has been recorded in some time. Higher shipment prices, strength in foreign exchanges, and better demand, all account to some extent for the higher prices. Anise and cassia were up on the Chinese situation. Cedarleaf shot skyward and cedarwood was again slightly higher. Sweet almond oil and the Messina essences were higher. Cananga, caraway, peppermint, rosemary and lavender were somewhat easier.

Oil Anise

Owing to higher cables from China due to the situation there, spot prices of anise went up slightly here. Technical was quoted at 59c to 60c lb. and U. S. P. at 62c to 65c lb. spot.

Oil Bergamot

Lower prices have developed during the month as new oil becomes available. The former high levels are now down to $6.50 lb. spot for standard goods. Artificial bergamot $2.50 to $3.50 lb.

Oil Cananga

New goods offered at slightly lower prices. Spot technical oil now named at $4.75 with rectified oil at $4.80 to $5.00 lb.

Oil Cassia

Higher on spot following higher cables from China. Prices for U. S. P. oil were up from a low of $1.90 and closed at $2.05 to $2.10. Technical oil $1.70 lb.

Oil Citronella

Further weakening brought lower prices last month. Ceylon oil closed at 35c to 38c lb. drums as to seller, with Java oil held at 50c up to 58c as to quality spot.

Oil Cedar

Oil of cedarleaf jumped up sharply to $1.25 lb. spot at the close with stocks scarce. Oil of wood also firmer at 35c lb. inside spot with stocks firmly held.

Oil Geranium

No material change has been recorded in geranium this month. Prices are slightly firmer, but at about the same levels. Spot holds at $2.75 to $3.00 lb. Demand from soapers is quite active at these low levels.

Oil Lavender

Somewhat of an easier tendency was reported in lavender during the month owing to an unsettled market. Spot goods were offered all the way from $3.50 lb. up to $4.75, according to quality desired by the purchaser.

Oils Messina

Both orange and lemon recovered from their recent weakness and turned upward early this month on high quotations abroad. Lemon closed at $2.50 lb. for standard Italian oil at the close with American held at $2.25. Orange held at $2.50.

Oil Peppermint

Further weakness brought lower prices on spot for peppermint oils which are now selling at a fraction of their former prices. Spot natural was held at $4.15 to $4.25 lb. and redistilled at $4.50 to $4.75 lb. Spearmint closed $4.25.

Oil Rosemary

There are reports of some lower prices. However, almost any price can still be paid according to the quality wanted. Spot quotations for technical oil run from 34c up to 40c drums spot. U. S. P. oil is held at 48c to 55c lb. as to seller.

Francis H. Sloan, for over sixty years associated with the New York essential oil house of Dodge & Olcott, resigned as chairman of the company's board of directors, effective Feb. 1. Mr. Sloan entered the employ of Dodge & Olcott in 1866 and became a partner in 1886. He was president of the company from 1918 until its reorganization a year ago, when he was elected to the position just vacated.

S. W. Allender, purchasing agent of Monsanto Chemical Works, has been appointed assistant to the manager of the Monsanto acid and intermediate plant. H. M. Harker is the new purchasing agent.

Caustic soda freight rates on the New York Central, from Niagara Falls to Brooklyn, have been reduced 5c a hundredweight. To Coney Island the new rate is 25c and to stations between Fortieth street and East New York the rate is 26.5c. The change is effective Feb. 15.

"COLUMBIA BRAND"

Caustic Soda

SOLID — FLAKE
GROUND — LIQUID

Soda Ash

LIGHT — DENSE

Columbia Chemical Division

Pittsburgh Plate Glass Co., Barberton, Ohio

QUALITY ~ **SERVICE**

Address all Communications to

THE ISAAC WINKLER & BRO. CO.

Sole Agents

FIRST NATIONAL BANK BLDG., CINCINNATI, OHIO

50 BROAD STREET NEW YORK

TRI SODIUM PHOSPHATE

GRASSELLI

17 SHIPPING POINTS

You will find in GRASSELLI *Tri Sodium Phosphate* unvarying uniformity—you can depend on *every* shipment being the same high quality.

Shipments more prompt and complete than you can secure from any other source of supply. This, of course, is made possible by our 17 Grasselli branches and warehouses in 17 cities.

GRASSELLI GRADE *A Standard Held High for 88 Years*

THE GRASSELLI CHEMICAL COMPANY — EST. 1839 — CLEVELAND, OHIO
··· NEW YORK OFFICE AND EXPORT OFFICE 347 MADISON AVE. COR. 45TH STREET ···

BRANCHES AND WAREHOUSES

ALBANY	CHARLOTTE, N.C.	MILWAUKEE	PHILADELPHIA
BIRMINGHAM	CHICAGO	NEW HAVEN	PITTSBURGH
BOSTON	CINCINNATI	NEW ORLEANS	ST. LOUIS
BROOKLYN	DETROIT	PATERSON	ST. PAUL

Say you saw it in SOAP!

Market Report on

SOAP AND DISINFECTANT CHEMICALS

(As of February 7, 1927)

A GENERALLY strong tendency in chemical prices with an expansion in both demand and shipments were reported during the month of January and for the early part of February. Contract quantities of chemicals taken by consuming industries during January were well up to the levels established last year. Prices were firm and one or two unexpected advances were noted. Buying of materials for spring manufacturing requirements is quite heavy.

Alkalies

Movement of alkalies into consuming channels has expanded again after a lull which was apparent during the closing month of 1926. Both soda ash and caustic soda are moving in large volume. Various other sodas have been in good demand. Export of alkalies has shown some increase with the turn of the year. Practically all the 1927 contract business from the soap makers is reported on the books. Prices are held to schedule without change, basis $3.00 caustic contract.

Glycerin

Lack of buying has softened the glycerin position further this month. A cessation of heavy buying for import from abroad has left stocks on the other side without a ready market with a consequent tendency on the part of foreign shippers to cut prices in offering to the American market. Dynamite was reported offered at 25c works drums at the close; C. P. was officially lower at 29c; saponification was reported easier at 19½c; lye at 17¼c. Demand has been dull, but some factors look for a marked turn in the market within the next two months.

Rosins

Reports from primary markets indicate a continuation in the dwindling of stocks on hand as compared with previous years. That there is to be any relief from the continued and apparently growing shortage of pale grades, is said to be unlikely. Dark rosins are evidently in good supply and the close of the period saw some softening in their position. No drop in grades N to WW, however, has been noted in some time. At the close, B was $12.15, about 45c under a month ago. Others were F, $12.40; K, $14.65; N, $15.85; WG, $16.75; WW, $18.60. Wood rosin held at $10.00 bbl. works. (See Editorial on Rosin Tares, Page 15.)

Caustic Potash

No change in prices, but several suppliers here still sold up and the market looks to higher levels. Importers are not contracting ahead of Mar. 1 for delivery at current prices. Price likely to move up some 5% Apr. 1 or sooner. Stocks are reduced and demand keeps at the peak. (See Article on Caustic Potash Situation on Page 17.)

Coal Tar Products

Cresylic acid position appears firmer. Stocks in domestic markets are smaller and sellers are holding prices firm. Better shipments are offered from England, but shippers show tendency to hold their prices at high levels. Domestic demand is fairly active. Prices range from 60c to 65c gal. for dark and pale as to grade. Creosote oil in active demand with prices strong. Report upward tendency of prices. Now 14c to 17c gal. works. Stocks of tar acid oils indicated smaller with prices firm at 26c to 30c gal. works.

Insect Powder

Demand for insect powder has been steady and good volume is moving to repackers. Prices range from 20c up to 25c lb. as to seller and quality. Flowers are in good demand at the higher prices noted some time ago.

Formaldehyde

Higher prices are in effect for formaldehyde due to the strong position of both this material and wood alcohol. Now named at 11½c works in drums to 12c for small lots.

Russell Howe and Harold King have taken over the New York portion of the business of McLaughlin, Gormley, King Co., Minneapolis, importers of and dealers in insect flowers and other crude drugs. They will incorporate the business under the name of King & Howe. Mr. King is a son of G. M. King, of the Minneapolis firm, and has been manager of the company's New York office for five years. Mr. Howe, a son of Harry Howe, of Dodge & Olcott, has been associated with Charles L. Huisking, Inc. and recently was connected with the Biddle Purchasing Co.

TRI-SODIUM PHOSPHATE

The uniformly high quality of the General Chemical Company's output of Tri-Sodium Phosphate justifies its adoption as standard by discriminating buyers.

GENERAL CHEMICAL COMPANY

GENERAL CHEMICAL COMPANY

40 Rector Street, New York

Cable Address, Lycurgus, N.Y.

Baltimore, Buffalo, Chicago, Cleveland, Denver, Easton, Los Angeles, Philadelphia, Pittsburgh, Providence, San Francisco, St. Louis

The Nichols Chemical Co., Ltd., Montreal

Unceasing Vigilance Safeguards the Uniformity of Diamond Alkalies

DIAMOND Alkali Chemists have made the varied alkali requirements of industry a lifetime study. ¶All the skill that comes with this intimate knowledge is concentrated in the production of Diamond Alkalies of the highest purity and uniformity. ¶Every carload is manufactured to an exacting standard and guaranteed by analysis to conform to these quality specifications. ¶It is this unceasing vigilance that has established Diamond Alkalies as the acme of quality throughout every industry it serves.

58% Soda Ash—76% Caustic Soda
Modified Soda — Special Alkalies
Bicarbonate of Soda

CONVENIENT WAREHOUSE STOCKS IN YOUR VICINITY

DIAMOND ALKALI COMPANY

PITTSBURGH ALKALI PENNSYLVANIA

CURRENT PRICE QUOTATIONS

Chemicals

Acetone, C. P., drums	lb.	.13	.14
Acid, Boric, bbls.	lb.	.08½	.09
Cresylic, 95%, dk., drums	gal.	.58	.63
97-99%, pale, drums	gal.	.60	.66
Formic, 85%, tech.	lb.	.10½	.11
Oxalic, bbls.	lb.	.12	.13
Salicylic, tech.	lb.	.28	.30
Sulfurous, 6% cbys.	lb.	.06	.07
Adeps Lanae, hydrous, bbls.	lb.	.16	.20
Anhydrous, bbls.	lb.	.19	.22
Alcohol, Ethyl, U. S. P., bbls.	gal.	3.90	4.00
Complete Denat., No. 5, drums ext.	gal.	.35	.40
Ammonia Water, 26 deg., drums wks.	lb.	.03	.04
18 deg., drums wks.	lb.	.02½	.03
Ammonium Carbonate, tech., bbls.	lb.	.10½	.13
Bay Rum, Porto Rico, denat., bbls.	gal.	.85	.95
St. Thomas, bbls.	gal.	.85	.90
Benzaldehyde, U. S. P.	lb.	1.20	1.40
Technical	lb.	.68	.72
Bleaching Powder, drums	100 lb.	2.40	3.00
Borax, pd., cryst., bbls., kgs.	lb.	.04½	.05
Carbon Bisulphide, drums	lb.	.06	.07
Carbon Tetrachloride	lb.	.07	.08
Caustic, see Soda Caustic, Potash Caustic			
China Clay, filler	ton	20.00	40.00
Cresol, U. S. P., carbys.	lb.	.18	.20
Creosote, U. S. P., carbys.	lb.	.42	.45
Creosote Oil, drums	gal.	.14	.17
Formaldehyde, bbls.	lb.	.11½	.12
Fullers Earth, bags	ton	25.00	35.00
Glycerin, C. P., drums	lb.	.29	.30
Dynamite, drums	lb.	.25	.26
Saponification, tanks	lb.	.19½	.20
Soap, Lye, tanks	lb.	.17½	.18
Hexalin, drums	gal.	4.75	5.00
Iodine, resubl. jars	lb.	4.65	4.90
Iodoform, bottles	lb.	6.00	6.50
Kieselguhr, bags	ton	65.00	75.00
Lanolin, see Adeps Lanae.			
Lead Acetate (Sugar Lead), white	lb.	.15	.16
Lime, live, bbls.	100 lb.	1.10	1.20
Menthol cases	lb.	4.75	5.00
Synthetic	lb.	3.75	4.00
Mercury Bichloride, kegs	lb.	1.20	1.30
Naphthalene, ref. flakes, bbls.	lb.	.05	.06
Nitrobenzene (Myrbane), drums	lb.	.10	.11
Paraffin, cases, slabs	lb.	.06½	.07
Paradichlorobenzene, bbls.	lb.	.20	.22
Paraformaldehyde, cases	lb.	.45	.50
Petrolatum, bbls. (as to color)	lb.	.03	.13
Phenol (Carbolic Acid), drums	lb.	.18	.22
Pine Oil, bbls.	gal.	.69	.72
Potash, Caustic, drums	lb.	.07¼	.08
Potassium Bichromate, casks	lb.	.09	.09½
Pumice Stone, powd.	100 lb.	3.00	3.50
Rosins (600 lb. bbls. gross for net)—			
Grade B to H, basis 280 lb. bbl.	bbl.	12.15	13.00
Grade K to N	bbl.	14.65	15.85
Grade WG and WW	bbl.	16.75	18.60
Wood, works	bbl.	—	10.00
Rotten Stone, powd., bbls.	lb.	.02½	.05
Silica, Ref., floated	ton	20.00	30.00
Soda Ash, Contract, wks., bags	100 lb.	1.38	1.50
Five bbls. up, local	100 lb.	2.29	2.50
Soda Caustic, Contract, wks. sld.	100 lb.	3.00	3.20
Five drums up, solid, local	100 lb.	3.76	3.90
Five drums up, grnd. flk.	100 lb.	4.41	4.65
Soda Sal, bbls.	100 lb.	1.30	1.50
Soda, Sesquicarbonate, bbls.	100 lb.	3.00	3.75
Sodium Chloride (Salt)	ton	13.00	20.00
Sodium Fluoride, bbls.	lb.	.09½	.10
Sodium Hydrosulphite, bbls.	lb.	.24	.28
Sodium Phosphate, bbls. (Trisodium phosphate)	lb.	.04½	.05
Sodium Silicate, 40 deg., drums	100 lb.	.80	1.25
Drums, 60 deg., wks.	100 lb.	1.70	2.00
In tanks, 10c less per hundred works.			
Tar Acid Oils, 15-25%	gal.	.26	.30
Zinc Stearate, bbls.	lb.	.26	.30

Oils—Fats—Greases

Castor, No. 1, bbls.	lb.	.14¼	.14
No. 3, bbls.	lb.	.13¼	.13
Blown, bbls.	lb.	—	.17¼
Coconut, bbls., N. Y.	lb.	—	.09½
Tanks, Coast	lb.	—	.08¼
Cod, Newfoundland, bbls.	gal.	.63	.65
Tanks, N. Y.	gal.	.61	.63
Copra, bags, N. Y.	lb.	—	.05⅜
Corn, ref., bbls., N. Y.	lb.	—	.12
Crude, tanks mills	lb.	—	.07¾
Bbls., N. Y.	lb.	—	.11
Cottonseed, crude, tanks mill	lb.	—	.08
PSY., bbls., N. Y.	lb.	—	.08¾
Degras, Amer., bbls., N. Y.	lb.	.04¾	.05
English, light, bbls., N. Y.	lb.	.05½	.06
Brown, bbls., N. Y.	lb.	.05	.05½
Light brown, bbls., N. Y.	lb.	.04½	.04¾
Dark, bbls., N. Y.	lb.	.04	.04¼
Neutral, bbls., N. Y.	lb.	.08½	.09
Greases, choice white, bbls., N. Y.	lb.	.07½	.10
Yellow	lb.	—	.06⅝
Brown	lb.	—	.06⅛
House	lb.	—	.06⅛
Bone Naphtha	lb.	—	.06⅝
Lard, prime steam, tierces	lb.	—	.13⅛
Compound, tierces	lb.	.10	.10½
Lard Oil, edible prime	lb.	—	.15
Off prime, bbls.	lb.	—	.13
Extra, bbls.	lb.	—	.12¼
Extra, No. 1, bbls.	lb.	—	.10½
No. 2, bbls.	lb.	—	.10
Linseed, raw, bbls., spot	lb.	.10⅝	.10⅞
Tanks, raw	lb.	—	.09⅝
Boiled, 5 bbl. lots	lb.	—	.11⅝
Menhaden, crude, bbls., works	gal.	—	—
Crude, tanks, Balt.	gal.	—	.40
Light pressed, bbls.	lb.	.58	.60
Yellow, bleached, bbls.	gal.	.61	.63
Extra bleached, bbls.	gal.	.63	.65
Oleo Oil, No. 1, bbls., N. Y.	lb.	—	.10¾
No. 2, bbls., N. Y.	lb.	—	.09¾
No. 3, bbls., N. Y.	lb.	—	.08¾
Olive, denatured, bbls., N. Y.	gal.	1.50	1.55
Edible, bbls., N. Y.	gal.	2.00	2.30
Foots, bbls., N. Y.	lb.	—	.09¾
Shipments	lb.	.08¾	.09
Palm, Lagos, casks, spot	lb.	—	.08½
Shipments	lb.	—	.08¾
Niger, casks, spot	lb.	—	.07¾
Shipment	lb.	—	.07⅜
Palm Kernel, casks shipments	lb.	—	.09
Peanut, refined, bbls., N. Y.	lb.	.14½	.16
Crude, bbls., N. Y.	lb.	—	.11
Red Oil, distilled, bbls.	lb.	—	.09½
Saponified, bbls.	lb.	.09¾	.10
Tanks	lb.	—	.09
Soya Bean, crude, tks., Pacific Coast	lb.	—	.09¼
Crude, tanks, N. Y.	lb.	—	.11½
Crude, bbls., N. Y.	lb.	—	.12
Refined, bbls., N. Y.	lb.	—	.14
Stearic Acid, s. p. 200 lb. bags	lb.	—	.12
Double Pressed	lb.	.12	.12½
Triple pressed, bgs.	lb.	.14	.14½
Stearine oleo, bbls.	lb.	—	.09¾
Tallow, edible tierces	lb.	—	.08¾
City, extra loose	lb.	—	.07¾
Tallow oils, acidless, tanks, N. Y.	lb.	—	.10¼
Bbls., c/l, N. Y.	lb.	—	.10¾
Whale, nat. winter, bbls., N. Y.	gal.	—	.78
Blchd., winter, bbls., N. Y.	gal.	—	.80
Extra blchd., bbls., N. Y.	gal.	—	.82

LABELS

WE CARRY the largest line of high grade, exclusively designed stock labels for perfumes and toilet preparations in the world.

For $2.00 we'll send you our complete sample line, approximately 1,400 designs. The $2.00 will then be credited to you on receipt of your order.

THE HENDERSON LITHOGRAPHING CO.
4530 MAIN STREET, Norwood, CINCINNATI, OHIO

CITRONELLAL for Soap

Cheaper than Citronella Java
Goes Farther

A. M. TODD COMPANY
KALAMAZOO MICHIGAN

BUSINESS ESTABLISHED IN 1869

Say you saw it in SOAP!

CURRENT PRICE QUOTATIONS

(Continued)

Essential Oils

Almond, Bitter, U. S. P.	lb.	2.90	3.50
Bitter, F. F. P. A.	lb.	3.00	3.75
Sweet, cans	lb.	.85	.95
Apricot, Kernel, cans	lb.	.62	.65
Anise, Tech., cans	lb.	.60	.62
U. S. P., cans	lb.	.62	.65
Bay, tins	lb.	1.90	2.00
Bergamot, coppers	lb.	6.50	7.00
Artificial, cans	lb.	2.50	3.50
Birch Tar, rect., bot.	lb.	.55	.60
Crude, tins	lb.	.18	.20
Boise de Rose, tins	lb.	2.10	2.50
Cade, cans	lb.	.27	.29
Cajuput, native, tins	lb.	.75	.80
Calamus, bot.	lb.	3.75	4.00
Camphor, Sassy, drums	lb.	—	.14½
White, drums	lb.	.11½	.12
Cananga, native, tins	lb.	—	4.75
Rectified, tins	lb.	4.80	5.00
Caraway Seed	lb.	1.70	1.80
Cassia, 80-85%	lb.	1.70	1.80
Redistilled, U. S. P., cans	lb.	2.00	2.15
Cedar Leaf, tins	lb.	1.25	1.30
Cedar Wood, light, drums	lb.	.35	.40
Citronella, Ceylon, drums	lb.	.35	.40
Java, drums	lb.	.50	.55
Cloves, U. S. P., cans	lb.	1.60	1.70
Copaiba	lb.	.40	.45
Eucalyptus, Austl., U. S. P., cans	lb.	.53	.56
Fennel, U. S. P., tins	lb.	.80	.90
Geranium, African, cans	lb.	2.75	3.00
Bourbon, tins	lb.	2.75	3.00
Hemlock, tins	lb.	.85	.90
Lavender, U. S. P., tins	lb.	3.50	4.50
Spike, Spanish, cans	lb.	1.00	1.30
Lemon, Ital., U. S. P.	lb.	2.50	2.75
Lemongrass, native, cans	lb.	1.00	1.10
Linaloe, Mex., cases	lb.	2.25	2.40
Neroli, Bigarde, ¼ & 1 lb. bot.	lb.	75.00	100.00
Petale, 1 lb. bot.	lb.	100.00	125.00
Artificial, 1 lb. bot.	lb.	10.00	20.00
Nutmeg, U. S. P., tins	lb.	1.65	1.70
Orange, bitter, tins	lb.	2.70	2.90
Sweet, W. Ind., tins	lb.	2.50	2.60
Italian, cop.	lb.	2.60	2.70
Distilled	lb.	1.70	1.80
Origanum, cans tech.	lb.	.25	.28
Patchouli	lb.	7.00	7.50
Pennyroyal, dom.	lb.	2.00	2.15
Imported	lb.	1.75	2.00
Peppermint, nat. cases	lb.	4.15	4.25
Redis., U. S. P., cases	lb.	4.50	4.75
Petit Grain, S. A., tins	lb.	2.00	2.10
Pinus Sylvestris	lb.	.85	1.25
Pumilio, U. S. P.	lb.	2.25	2.50
Rose, French	oz.	9.00	9.50
Bulgarian	oz.	9.50	11.00
Artificial	oz.	2.00	2.75
Rosemary, U. S. P., drums	lb.	.48	.55
Tech., lb. tins	lb.	.34	.40
Sandalwood, E. Ind., U. S. P.	lb.	7.10	7.25
W. Indian (Amayris)	lb.	1.80	2.00
Sassafras, U. S. P.	lb.	.80	1.00
Artificial	lb.	.25	.28
Spearmint, U. S. P.	lb.	4.50	5.00
Spruce	lb.	.85	.90
Thyme, red, U. S. P.	lb.	.75	.80
White, U. S. P.	lb.	.95	1.00
Tech.	lb.	.65	.70
Vetivert, Bourbon	lb.	15.00	17.00
Java	lb.	20.00	22.00
Ylang Ylang, Bourbon	lb.	6.00	8.00

Aromatic Chemicals

ISOLATES

Anethol	lb.	1.00	1.25
Citral	lb.	2.75	3.00
Citronellal		2.50	3.00
Eucalyptol, U. S. P.	lb.	.90	.95
Eugenol, U. S. P.		2.75	3.00
Geraniol, Domestic	lb.	2.25	3.50
Imported	lb.	2.50	3.75
Iso-Eugenol	lb.	3.75	3.90
Linalool	lb.	4.50	6.50
Rhodinol	lb.	16.00	20.00
Safrol	lb.	.29	.31
Thymol, U. S. P.	lb.	3.10	3.30

SYNTHETICS

Acetophenone, C. P.	lb.	3.50	3.75
Benzaldehyde, tech.	lb.	.70	.75
Benzyl Acetate	lb.	1.35	1.50
Alcohol	lb.	1.45	1.50
Benzoate	lb.	1.10	1.25
Citronellol	lb.	6.00	9.00
Citronellyl Acetate	lb.	13.00	14.00
Coumarin	lb.	3.60	3.75
Diphenyl oxide	lb.	1.00	1.25
Geranyl Acetate	lb.	4.50	5.00
Heliotropin, dom.	lb.	1.75	2.00
Hydroxycitronellal	lb.	10.00	11.00
Indol, CP	oz.	6.00	6.50
Ionone	lb.	6.00	9.00
Linalyl Acetate	lb.	3.50	7.50
Menthol	lb.	3.75	4.00
Methyl Acetophenone	lb.	3.75	4.25
Anthranilate	lb.	2.50	3.25
Paracresol	lb.	8.00	9.00
Salicylate, U. S. P.	lb.	.47	.50
Mirbane, rect.	lb.	.11	.15
Musk Ambrette	lb.	7.00	8.00
Ketone	lb.	7.00	10.00
Xylene	lb.	2.75	3.25
Phenylacetaldehyde	lb.	7.00	8.50
Phenylacetic Acid, 1 lb. bot.	lb.	3.00	3.25
Phenylethyl Alcohol, 1 lb. bot.	lb.	5.50	6.50
Terpinyl Acetate, 25 lb. cans	lb.	1.10	1.40
Terpeneol, CP, 1,000 lb. drs.	lb.	.35	.38
Cans	lb.	.37	.40
Vanillin, U. S. P.	lb.	7.00	7.50

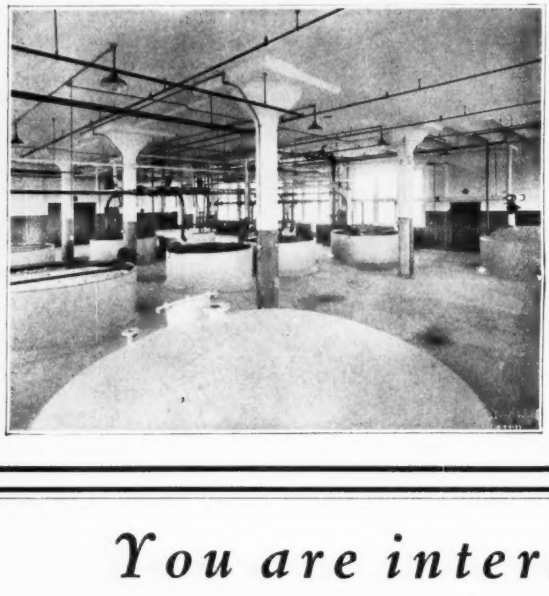
Miscellaneous

Insect Powder, bbls.	lb.	.21	.25
Concentrated Extract	gal.	2.00	2.10
Gums—			
Arabic, Amb. Sts.	lb.	.11	.13
White, powdered	lb.	.19	.20
Karaya	lb.	.10	.15
Tragacanth, Aleppo, No. 1	lb.	1.55	1.65
Sorts	lb.	.50	.60
Turkish, No. 1	lb.	1.20	1.30
Waxes—			
Bayberry, bgs.	lb.	.25	.26
Bees, white	lb.	.60	.65
African, bgs.	lb.	.39	.40
Refined, yel.	lb.	.45	.46
Candelilla, bgs.	lb.	.35	.37
Carnauba, No. 1	lb.	—	.75
No. 2, Yel.	lb.	.50	.52
No. 3, Chalky	lb.	.36	.38
Japan, cases	lb.	.25	.26
Paraffin, ref. 125-130	lb.	.06½	.07
Pine Oil, stm. dist.	gal.	.69	.72
Tar Oil, bbls. dist.	gal.	.50	.55
Commercial grade	gal.	.32	.40

W&S

WURSTER & SANGER, INC

Specialists in the Designing and Building of
COMPLETE SOAP PLANTS



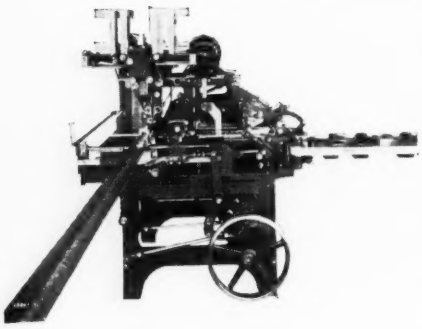
This photograph of the kettle room of Reuter's Soap Factory is a typical illustration of Wurster & Sanger engineering in soap plant construction.

New Plants Designed—
Old Plants Remodeled

Complete Plants for
Crude, Dynamite and C. P. Glycerine
Laundry, Toilet and Liquid Soaps
Spray-Process Soap Powder
Fatty Acid Distillation
Fat Splitting, Stearic Acid and Red Oil
Refining of Fats and Oils
Hydrogenation of Oils

WURSTER & SANGER, INC.
5201 Kenwood Avenue
Chicago

You are interested—



in wrapping your soap neatly and securely at a minimum cost.

This machine operates at a speed of from 100 to 175 per minute, depending on the size and shape of the cake to be wrapped and the character of the wrapper used.

Ferguson & Haas, Inc.
517 Greenwich Street - New York
Manufacturers of
Toilet and Laundry Soap Wrapping Machines
Soap Powder Carton Wrapping and Sealing Machines
Send us samples and let us give you complete details

Say you saw it in SOAP!

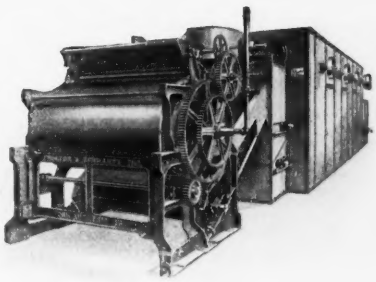
Machine Wrapping Development

(*Continued from Page 23*)

PERHAPS the most important problem in soap wrapping is due to the very general tendency on the part of most soap manufacturers to continue manufacturing soaps of peculiar shapes and sizes, soaps with high crowns, round corners or edges, etc. While it is true that the sale of these soaps, in their unusual forms, has been built up over a period of years, there has been some disposition recently, to question whether or not their sale would be seriously affected by changing their shapes. Experiments have been conducted by several well known soap houses to determine whether changing the cake physically would or not have any detrimental effect on its sale. Added to the fact that any variation from rectangular cakes cuts production speed in wrapping, is the fact that special machinery, as in the case of equipment for packaging oval cakes, costs substantially more than does ordinary equipment. While it may not be possible for most soap-making firms to change the appearance of their cakes, it will certainly be worth while for manufacturers of any new brands to consider carefully the subject of size and shape before placing new products on the market. Consultation with wrapping machinery manufacturers should be quite valuable, if economy in wrapping is any consideration at all. In the case of laundry soaps a cake measuring 4½ inches long, by 1½ inches thick, by 2¾ inches wide, and weighing from eleven to twelve ounces, can be handled best by automatic wrapping machines. These dimensions may be varied slightly, but they are recommended by experts in laundry soap wrapping. The most economical toilet soap cake for wrapping purposes, is one that should measure approximately 3 inches long, by 2 inches wide, by 1 inch thick. The weight may vary all the way from ½ to 4 ounces, the smaller weight being for guest and hotel cakes, which of course would be smaller in size and for which special wrapping machinery is built. In the case of both laundry and toilet soaps, it should be understood that the cakes must be rectangular to admit of economical wrapping. Fancy trimmings, in the way of round edges, etc., add to wrapping costs.

WAX paper wrapping is an outgrowth of cake soap wrapping, inasmuch as the wrapping operation is of the same general nature. Available information indicates that Procter & Gamble were the first in the soap industry to utilize this method of wrapping boxes containing soap powder. This was made necessary by the development of fluffy powder,

New dryer for thin chip soap!



Chilling rolls that produce the popular, very thin chip—a dryer that is radically new and improved throughout.

This combination in the new Proctor Chip Soap Dryer offers the opportunity of producing the fastest-selling laundry chip soap, at a new high rate of efficiency and a degree of operating economy never before achieved. The outstanding economies are savings in floor space, steam and power.

The sizes and capacities of the machines being built appeal alike to large and small manufacturers. Write and let us acquaint you with the new features of design and their proven advantages.

PROCTOR & SCHWARTZ, INC.

PHILADELPHIA, PA.

Not available in George Washington's day — unfortunately

CAUSTIC POTASH
(Flaked, solid or liquid)

CAUSTIC SODA
(Flaked, solid or liquid)

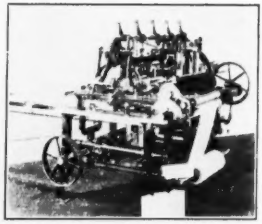
PARADICHLORBENZENE

Associated with Electro Bleaching Gas Company
Pioneer Manufacturer of Liquid Chlorine

NIAGARA ALKALI COMPANY
9 EAST 41ST ST NEW YORK CITY
PLANT: *Niagara Falls, N.Y.*

Joseph Turner & Co.
Sales Agents for Caustic Soda and Bleach
19 Cedar St.
New York

The "Improved Johnson" Wax Wrapping Machine



hermetically (heat) seals, in transparent paper, cartons or other square and rectangular objects at a guaranteed speed of up to sixty (60) per minute.

Our new folders have reduced the price

because they are so much simpler than devices formerly used for the purpose. They are covered by a patent which we own and the quality of their work is up to the high standard we have set ourselves.

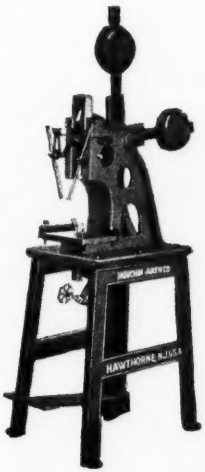
"The long seam is on the narrow panel"

NATIONAL PACKAGING MACHINERY CO.
192 Green Street, Jamaica Plain, Boston, Mass.

which sifted considerably more than did the powdered soap generally sold prior to 1910. The early drawbacks in the operation of wax paper wrapping machinery did not approach the proportions of those attendant on the building of the first cake soap wrapping machinery, as much of the information secured then was put to good use in building wax paper wrappers. Then too, for a few years before the first soap powder packages were wax-wrapped, food and confectionery products, such as "Cracker-jack" and products of the cereal companies, had been wax-wrapped. The early difficulties, in the way of this type of packaging, had to do mostly with the wax paper and the cartons. The wax paper was not uniform, sometimes consisting mostly of wax and then again mostly of paper. Wax in some spots and no wax in others added to the burden, as did breaks in the paper itself. The first machines for folding cartons did not produce square containers, in many instances, and the protruding edges often cut through the wax paper.

The first wax paper wrapping machines turned out about 40 packages a minute. By the time soap powder packages needed to be wax-wrapped production had been speeded up to 50 a minute and the best machines on the market today run between 50 and 70 a minute on average size packages. Smaller containers can be turned out in as great a quantity as 150 a minute.

TIGHT wrapped packages, that is plain cartons over which a printed wrapper has been glued, are among the most recent developments of interest to soap manufacturers. The first machine for wrapping such packages semi-automatically was introduced in 1916. Later an entirely automatic machine was built. This equipment is of chief interest to manufacturers of soap powders and other materials having a tendency to sift. The speed ranges between forty to sixty packages a minute, depending on the rate at which the cartons can be filled by the filling machinery used. The principal advantages of this equipment lie in the appearance of the finished package and in the cost of the package itself. Since the printing is done on the paper wrapper it shows up very well, the cost of the finished container depending, of course, on the quality of the wrapper. It has been estimated that the average tight wrapped package costs less, in itself, than does the wax-wrapped container or round shaker top can. Recently, the development of a tight wrapped package, with provisions for perforations at



for pressing

DEODORIZING BLOCKS

THE Houchin-Aiken No. 4 Soap Press; illustrated here, is eminently satisfactory. It turns out uniform cakes, either with or without raised lettering, that help you to get repeat orders.

Send us a small quantity of your product and we'll turn it into sample cakes. To keep pace with this new development in deodorizing block manufacture you'll find this machine a good investment.

HOUCHIN-AIKEN COMPANY - HAWTHORNE, N. J.

Makers of All Kinds and Types of

SOAP MACHINERY

On drying Soap

NEXT to quality comes low price quantity production in drying chip soap. Both quality and quantity results are obtained by the use of the Sargent Three Swing Shelf Conveyor progressive stage Chip Soap Drying Machines. These machines may be had with or without Chilling Rolls.

C. G. SARGENT'S SONS CORP.

GRANITEVILLE **MASSACHUSETTS**

THE NEWPORT PRODUCTS

for soap makers

TETRALIN and HEXALIN

Hydrogenated Coal Tar Bases with High Boiling Points and Better Dissolving Properties

for oils, waxes, greases and fats than the solvents commonly used — therefore they are ideal for incorporation with Soaps and Detergents destined to be used in textile processing.

NEWPORT TRADE MARK

The Newport Chemical Works, Inc.

Passaic, New Jersey

Branch Offices and Warehouses:

Boston, Mass. Providence, R.I. Philadelphia, Pa. Chicago, Ill. Greensboro, N.C.

the top, has occupied the attention of the machinery manufacturers.

INQUIRY among experts in wrapping toilet and laundry soap cakes and in wax-wrapping soap powder packages indicates that in addition to peculiar sizes giving trouble, the tendency on the part of a great many soap makers to push their machines to the limit is at the bottom of most complaints about and troubles with automatic wrapping machinery. Machines can only be made to do a certain amount of work in a given time and their manufacturers say that attempts to rush production beyond these limits only results in a loss of time and money. The proportion of packages that must be discarded as faulty is materially increased by speeding wrapping past a given point and the life of the machinery is very materially reduced. The soap manufacturer who is making the best possible use of automatic wrapping machinery is the one who is staying as close as possible, in most instances, to standard sizes and shapes and who is operating his equipment at the speed at which it was built to run. It is quite conceivable, considering developments of the past twenty-five years, that more flexible and faster wrapping machinery will be built, but until that time comes, being satisfied with the performance of equipment, as it is now built, will, in the long run, save a good deal in time, money and inconvenience.

List of Permitted Disinfectants

(*Continued from Page* 59)

"Roger's 50% Cresol Solution;" Detroit White Lead Works, Chicago, Ill.

"San-I-Sol;" McLaughlin Gormley King Co., Minneapolis, Minn. (Also distributed under names of: "San-I-Sol;" Peet Stock Remedy Co., Council Bluffs, Iowa. "20th Century Disinfectant;" 20th Century Mfg. Co., Cedar Rapids, Iowa.)

"Sapo-Cresol Special;" Cremoline Disinfecting Co., St. Louis, Mo. (Also distributed under name of: "Crespolin;" The Worrell Mfg. Co., St. Louis, Mo.)

"Sherwin-Williams 50% Cresol Solution;" The Sherwin-Williams Co., Chicago, Ill. (Also distributed under names of: "Corn States 50% Cresol Solution;" The Corn States Serum Co., Omaha, Nebr. "Ka-De-Co Cresol Solution 50%;" Kiefer-Stewart Indianapolis, Ind. "Hemingway's 50% Cresol Solution;" Hemingway & Co., Inc., Chicago, Ill.)

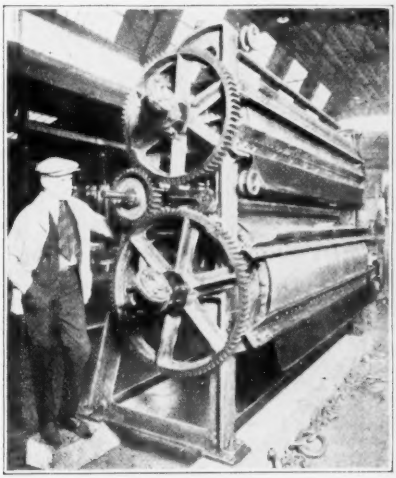
"Solcreo S. L.;" The Standard Laboratories, Chicago, Ill.

"Standard Saponified Cresol Solution;" The Standard Chemical Co., Tacoma, Washington.

"U. D. Solution Cresol Compound;" United Drug Co., Boston, Mass.

"Van Schaack's Liquor Cresolis Comp.;" Peter Van Schaack & Sons, Chicago, Ill.

"Western White Face Brand 50% Cresol Compound, (Saponified);" Western Chemical Corporation, Houston, Texas.



Garrigue Double Soap Powder Roll

The Roll Process of Soap Powder Manufacture offers the following advantages over other processes now in use:—

A uniform product and capacity under all conditions of atmospheric temperature and humidity.

Elimination of dust and waste.

Most efficient utilization of refrigerant.

Reduction in labor cost.

Economy of floor space.

WM. GARRIGUE & CO.

INCORPORATED

9 S. Clinton Street, Chicago

Complete Installations for

SOAP POWDER MANUFACTURE

Glycerine Recovery *Oil Refining*
Oil Hydrogenation *Glycerine Distillation*
Fatty Acid Distillation

ROBERT E. DIVINE

185 LARCH AVENUE
BOGOTA, N. J.

Assistance in solving chemical problems relating to the

TECHNOLOGY OF FATS and OILS

and in the manufacture of

Soaps

and

Glycerin

Special attention to the conservation of quality, in chip soaps, textile and fine toilet soaps.

FOR SALE

Good Equipment at Bargain Prices

1 New Albright Well Amalgamator
4 Chippers, 20", 24", 30".
8 Crutchers—Dopp & H-A — Strunz — 1500 #, 3000 #, 3600 #
200 Soap Frames—600 #, 1200 #, 1500 #
2 Stone Mills—H-A, 12"x24", 3 Roll and 18"x24", 3 Roll
2 Steel Mills—H-A, 14"x36", 5 Roll
1 Blanchard Mill—10A
3 Plodders—H-A, 8" and 10"—Huber 10"
10 Foot Presses—H-A, Huber, Dopp, Emire
2 Scouring Presses—H-A
2 Power Presses—Ralston, Jones
3 Remelters—Acme 30"x12½', 2 H-A 42"x6'
1 Slabber—H-A 600"
1 Continuous Chip Dryer—Proctor & Schwartz 1500 #
1 Glycerine Evaporator—Garrigue Complete
15 Filter Presses—12", 18", 24", 30", 36", 42".
75 Kettles and Pots—Plain, Jacketed, or Agitated 20 gals. to 2000 gals.
4 Soap Kettles—4 Kettles 50 tons each.
50 Tanks—Rectangular and Cylindrical, 50 to 14000 gals.

SEND FOR OUR LIST
SELL US YOUR IDLE EQUIPMENT

Consolidated Products Co., Inc.
15 Park Row, New York City

FOR IMMEDIATE LIQUIDATION FROM Long Island Soap Co. THESE ITEMS MUST BE REMOVED REGARDLESS OF COST

Crutchers—
4 Houchin-Aiken Jacketed (Vert.), 1200, 1500, 3000 & 6500 lbs.
Cutters and Slabbers—
1 Huber wood frame cross cutting table (power)
2 Huber wood Slabber (hand power)
1 Houchin-Aiken wood Slabber (power)
1 Houchin-Aiken steel frame Slabber (power)
Dryer—
1 Sargent Automatic Soap Chip Dryer, 1200 # per hour, complete with Chilling rolls.
Filter Presses—
8 Filter Presses, Iron, 18, 24, 30, 36 & 42 in. sq.
Engines—
6 Vertical Engines, 15 and 25 H.P.
Evaporator—
1 Garrigue Glycerine 48" dia. 3 section complete with salting out pan, pumps, etc.
Stone Mills—
2 18" x 24", 4 roll
Presses—
2 Houchin-Aiken Foot Press. Empire State.
1 Jones Automatic Press
Frames—
350, 600, 1200 # capacity—steel sides
Pumps—
4 Worthington Duplex Steam Pumps
9 Centrifugal and Rotary Iron Pumps
Plodders—
4 6", 8" & 10" Houchin-Aiken
Tanks and Kettles—
30 Jacketed Iron Kettles, 10-2000 gals.
20 Steel Storage Tanks, 100-12000 gals.
10 Copper & Aluminum Jacketed Kettles, 10 to 200 gals.
4 Vert. Copper Storage Tanks, 1400 gals.
Wrapping Machines, Etc., Etc.

STEIN-BRILL CORP.
25 CHURCH STREET
PHONE! New York City WRITE!
Phones—Rector 3168-9

SOAP MACHINERY

If it comes to a show-down on Soap Machinery, we have in stock, for immediate shipment, in first class condition.

Soap Chip Dryers—Proctor and Schwartz, Condon and Huber.
Crutchers—H-A, Dopp & Doll, 1000 #, 1200 #, 1350 #, 1500 # and 1500 # cap.
Automatic Soap Presses—Jones, Machinery Designing, & Ralston for toilet and laundry soap.
Foot Soap Presses—Dopp, Empire and Crosby.
Soap Powder Mills—Blanchard Nos. 10 and 14, A-N and Condon Crystallizing Rolls, Broughton Mixers.
Soap Cutting Tables—Hand-power, H-A Steel Automatic Table with self-spreader and extra headers.
Toilet Soap Mills—H-A and Rutschman 3, 4, 5 and 6-roll. Rutschman Plodders.
Filter Presses—Sperry & Perrin, 12", 18", 21" and 36".
Soap Wrapping Machines—Package Machinery and Machinery Designing for toilet and laundry soaps.
Soap Slabbers—New and Used. Various Makes.
Grinders & Mixers—Day Talcum Powder Mixers and Sifters, Schultz-O'Neill Mills & Day Rouge Mixers.
Tanks & Kettles—Copper, Aluminum and Steel Pneumatic Scale Can Filling Machine.
Soap Frames—600 #, 1000 #, 1200 #, 1500 # and 1800 # cap.
Soap Chippers.
Remelters, etc., etc.

Send us a list of your surplus equipment. We buy and sell single items or complete plants.

Newman Tallow & Soap Machinery Co.
1051-59 W. 35th St., Chicago, Illinois
Phones—Blvd. 1650-1

Say you saw it in SOAP!

1927